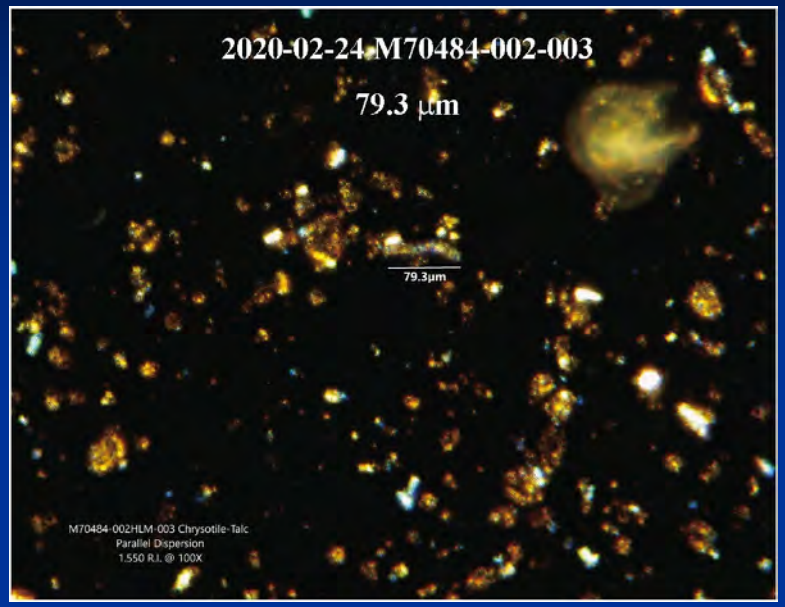
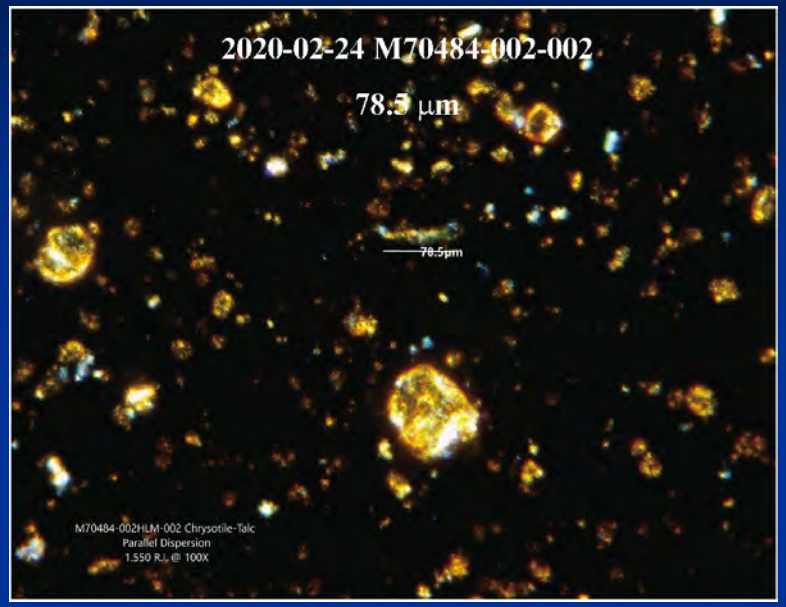
Exhibit 107 Part 2

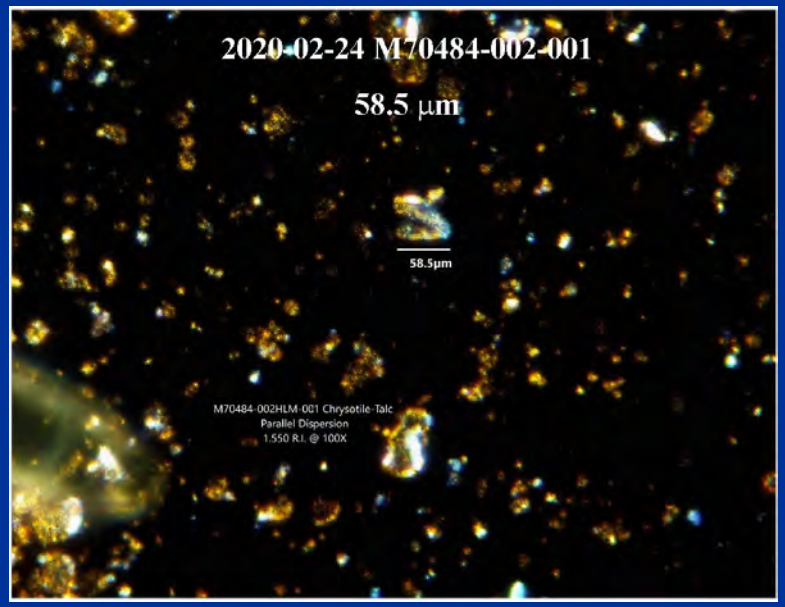
Incorrect Particle Size Measurement Results

2020-02-24 MAS Rpt JBP-Zimmerman





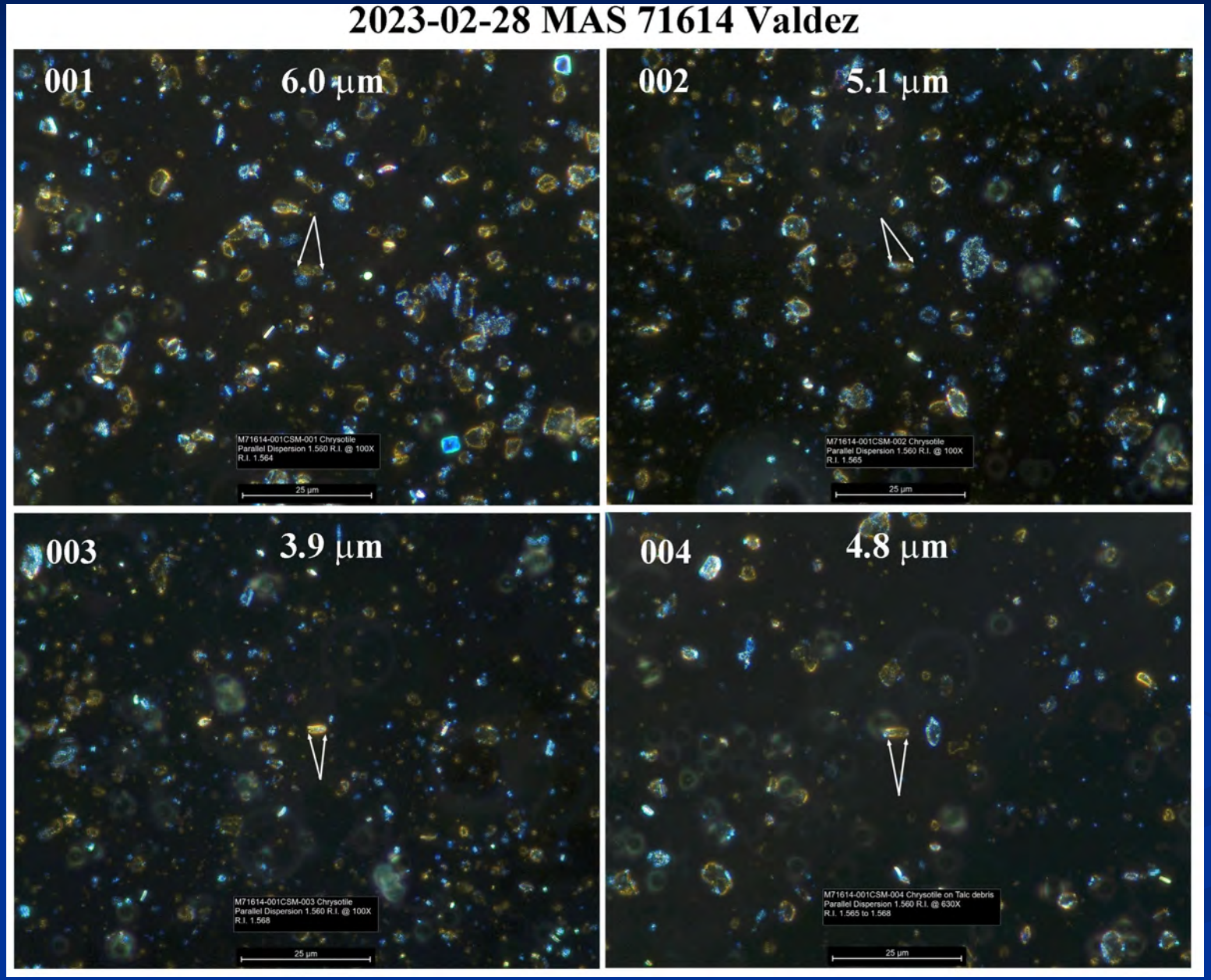
All three chrysotile particles were measured and labeled by MAS.



All four chrysotile particles are similar to the particle sizes of the matrix talc particles.

Incorrect Particle Size Measurement Results

2023-02-28 M71614 Valadez Bottle Report

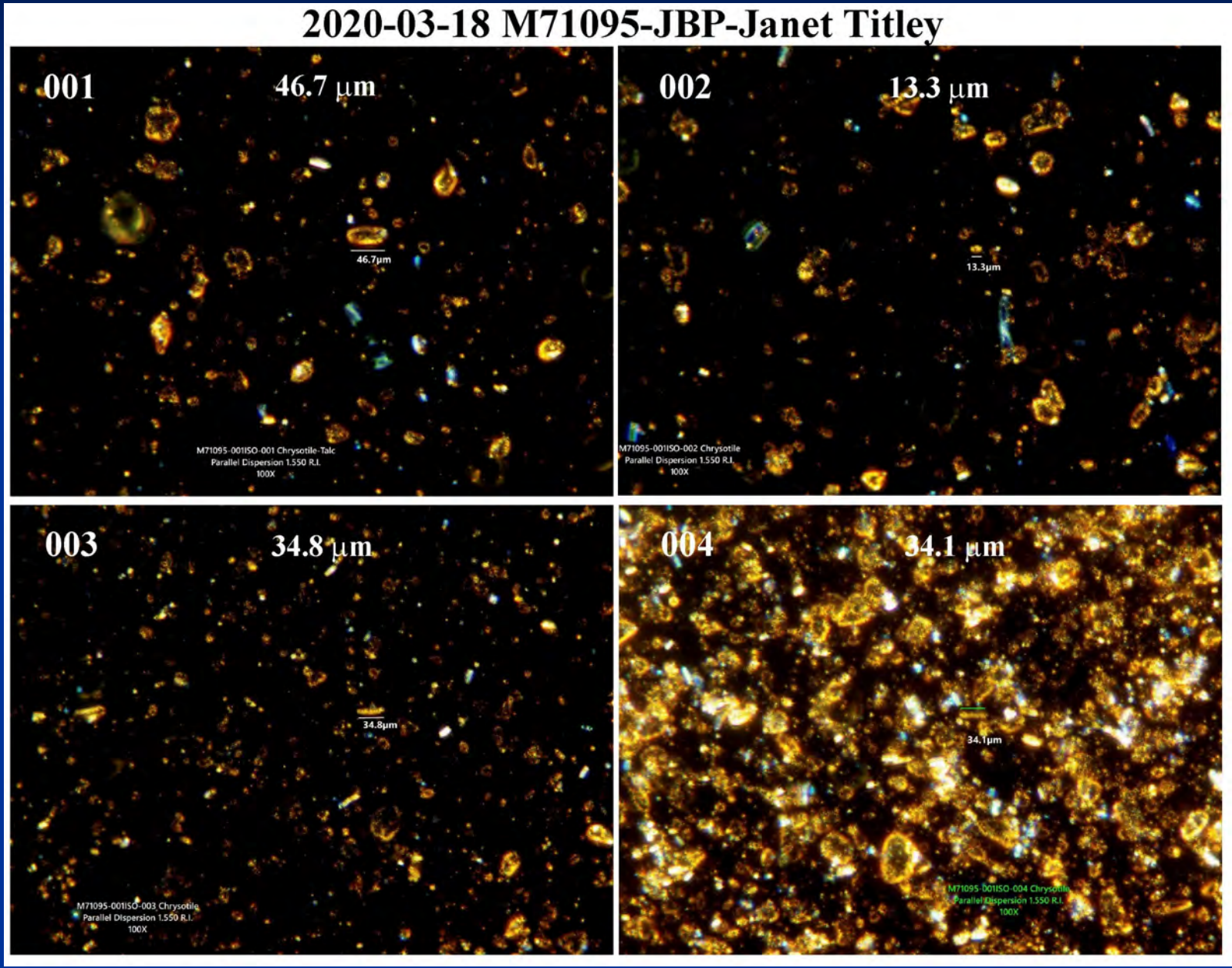


All four chrysotile particles are under 5 micrometers according to the scale bars.

All four chrysotile particles are similar to the particle sizes of the matrix talc particles.

Incorrect Particle Size Measurement Results

2020-03-18 M71095 Rpt JBP-Titley

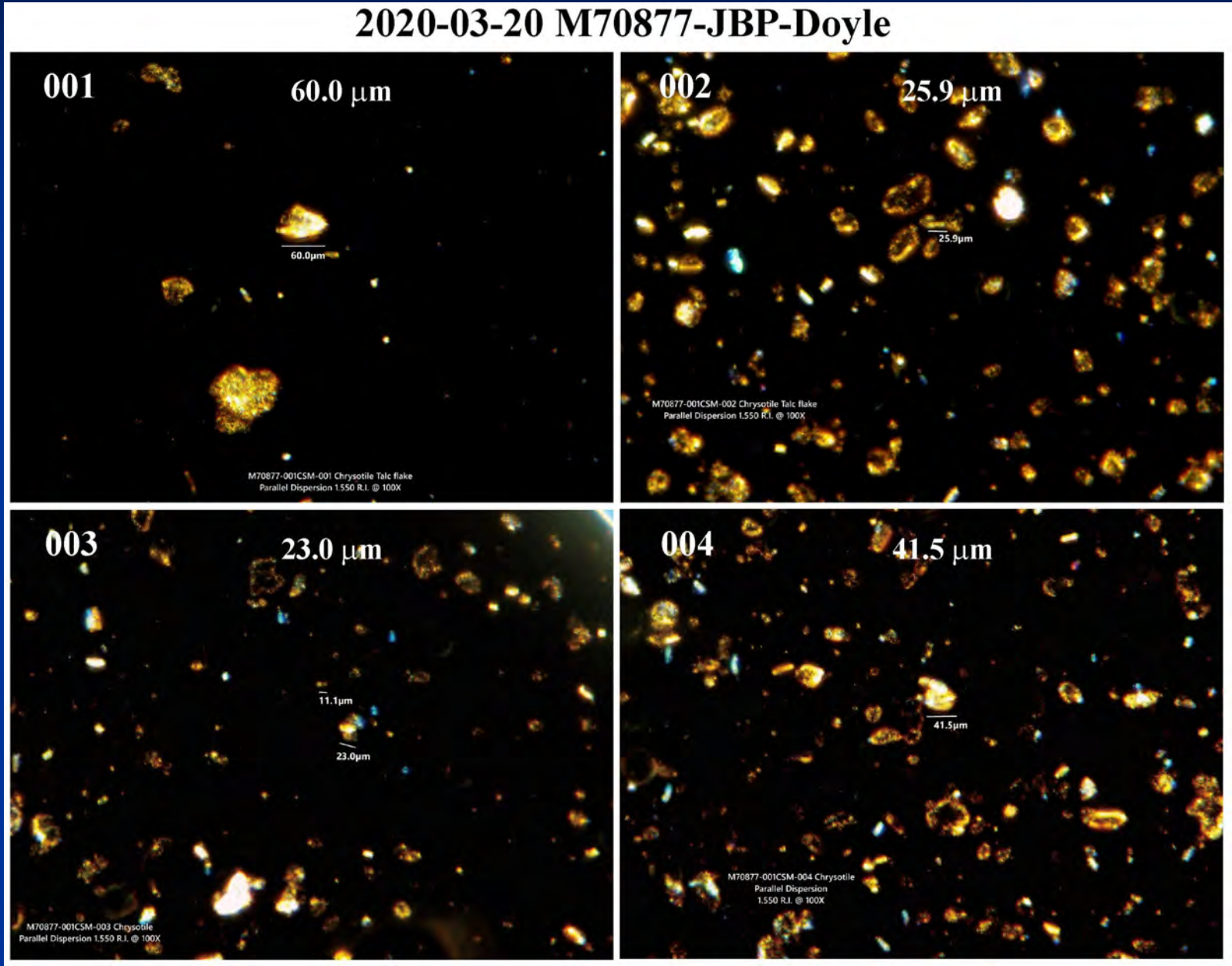


The talc and chrysotile particle sizes of all four samples are much greater than MAS's own data from their SEM analysis.

All four chrysotile particles are similar to the particle sizes of the matrix talc particles.

Incorrect Particle Size Measurement Results

2020-03-20 M70877 Rpt JBP-Doyle

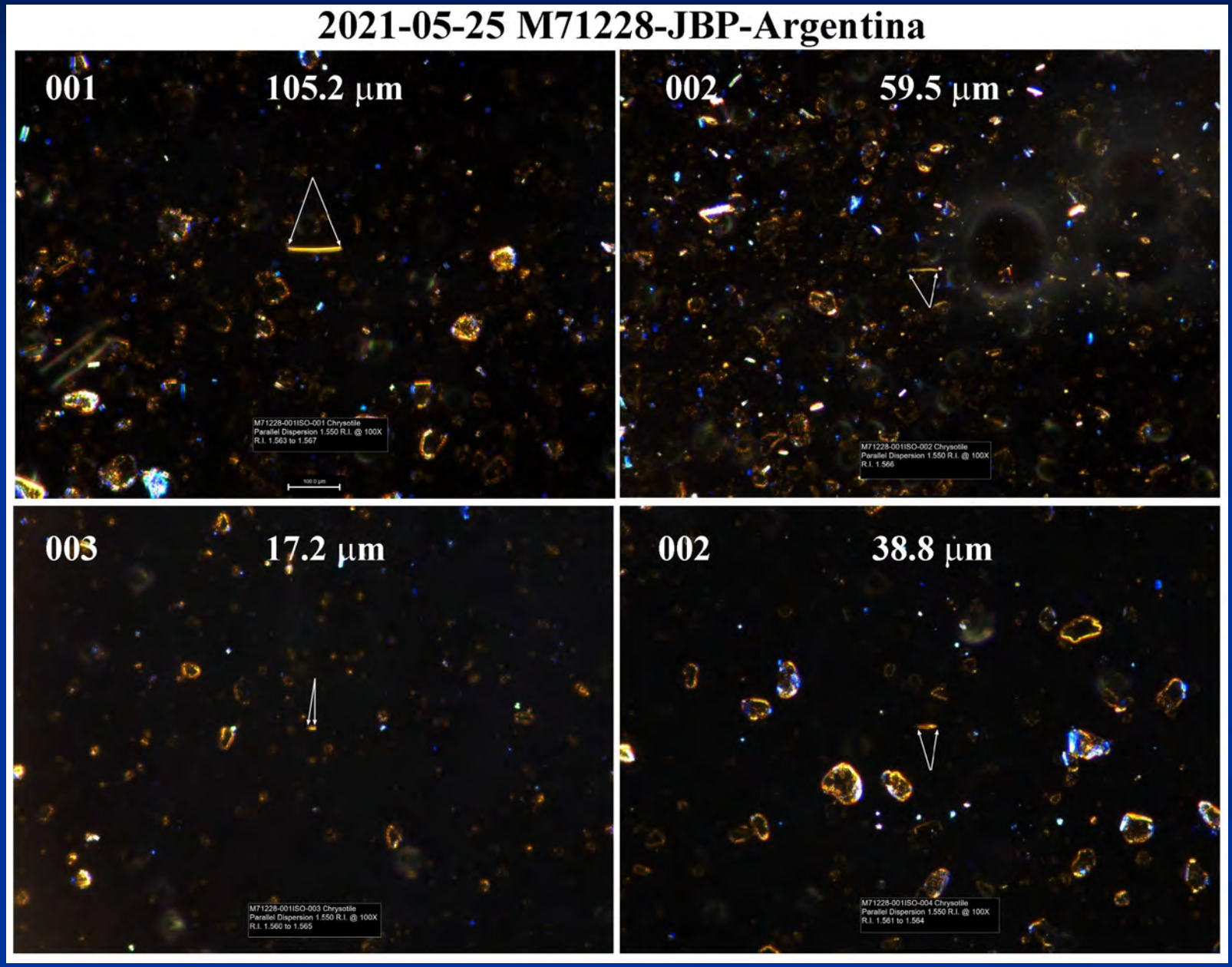


The talc and chrysotile particle sizes of all four samples are much greater than MAS's own data from their SEM analysis.

All four chrysotile particles are similar to the particle sizes of the matrix talc particles.

Incorrect Particle Size Measurement Results

2021-05-25 M71228 OTShelf JBP Purchased Argentina

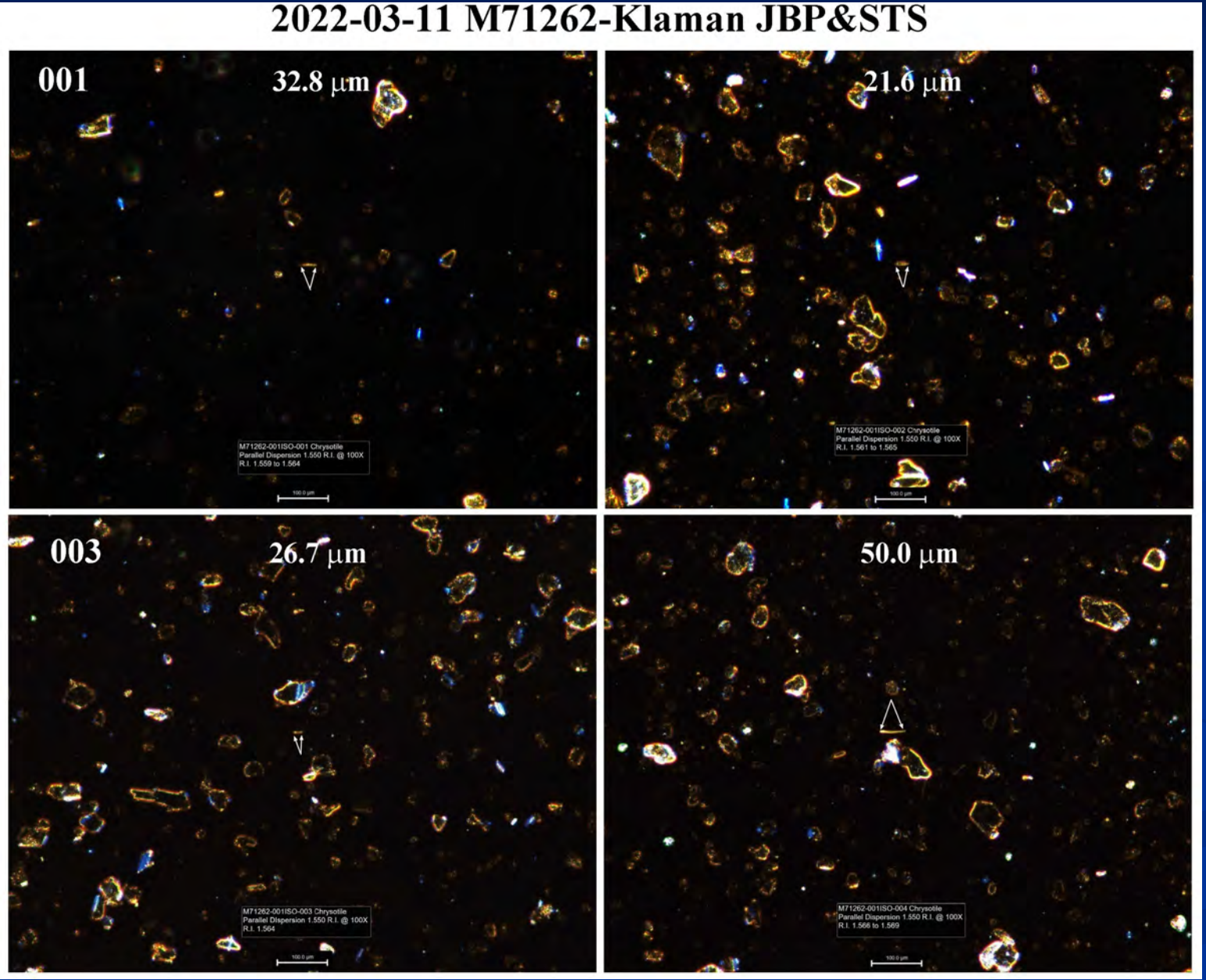


The talc and chrysotile particle sizes of all four samples are much greater than MAS's own data from their SEM analysis.

All four chrysotile particles are similar to the particle sizes of the matrix talc particles.

Incorrect Particle Size Measurement Results

2022-03-11 M71262 Analy of Klayman's JBP & STS Containers

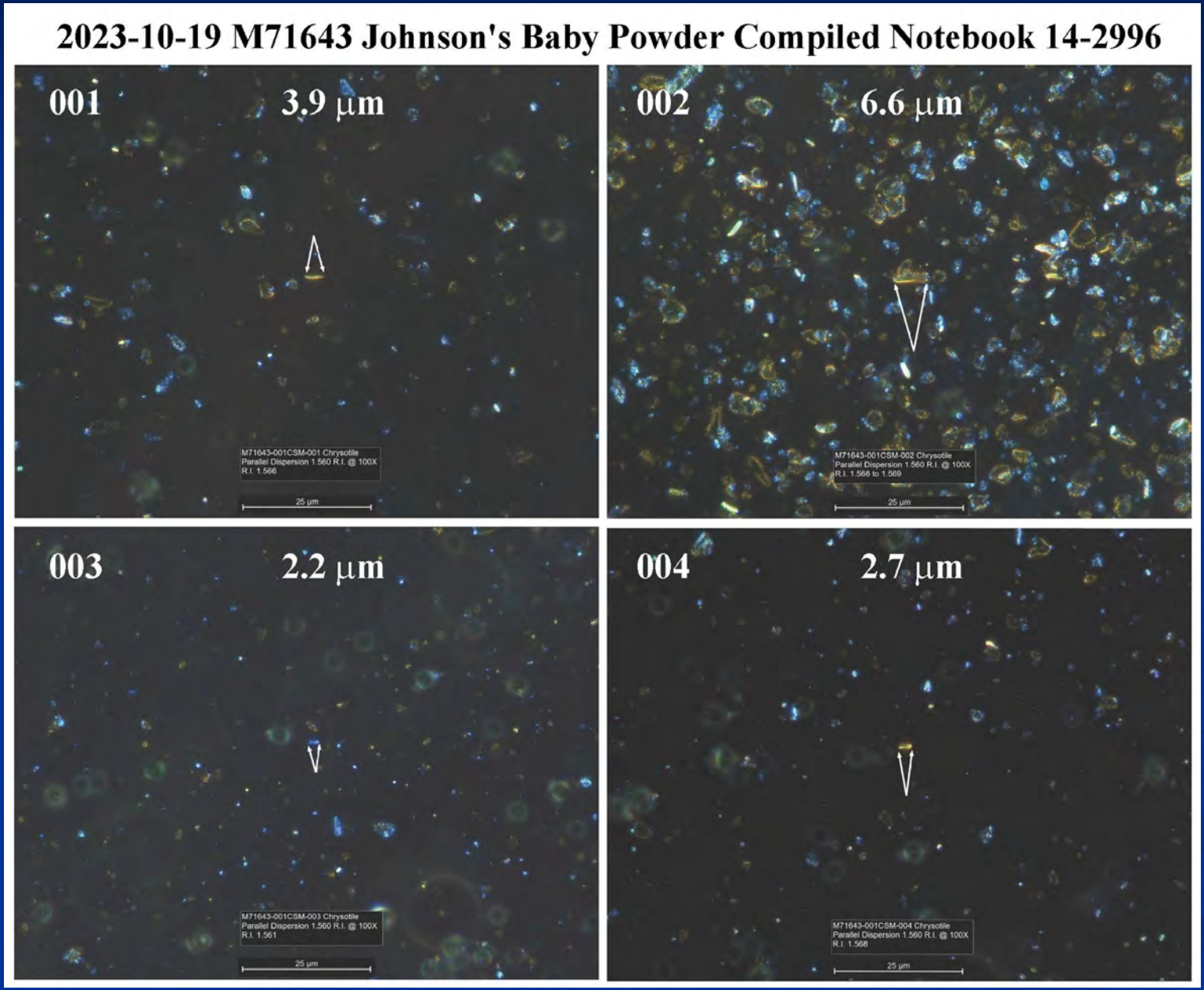


The talc and chrysotile particle sizes of all four samples are much greater than MAS's own data from their SEM analysis.

All four chrysotile particles are similar to the particle sizes of the matrix talc particles.

Incorrect Particle Size Measurement Results

2023-10-19 M71643 Johnson's Baby Powder Compiled Notebook 14-2996

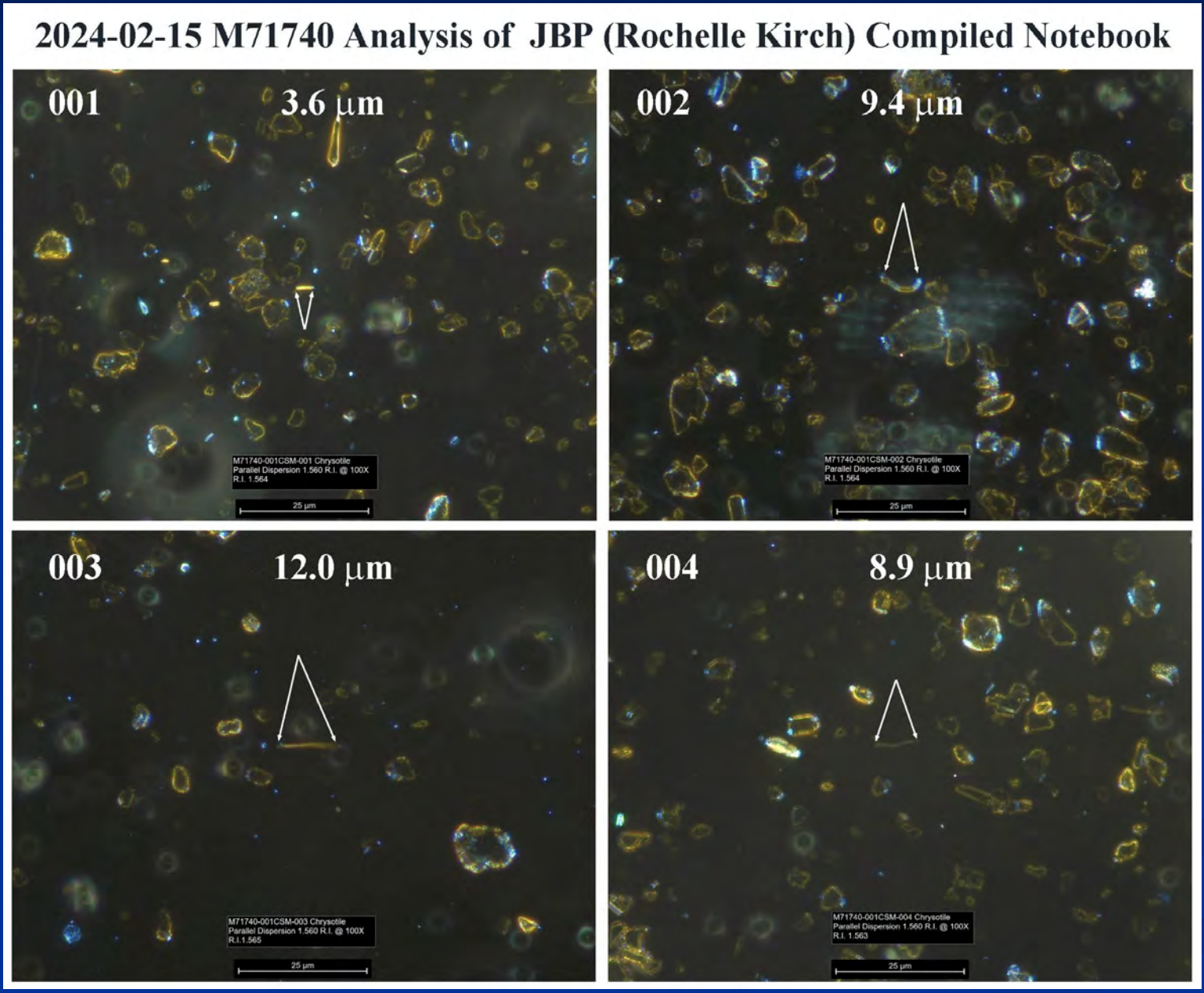


All four chrysotile particles are under 5 micrometers according to the scale bars.

All four chrysotile particles are similar to the particle sizes of the matrix talc particles.

Incorrect Particle Size Measurement Results

2024-02-15 M71740 Analysis of JBP (Rochelle Kirch) Compiled Notebook



The particle sizes of four chrysotile particles do not conform to MAS's SG-210 Calidria data (2023).

All four chrysotile particles are similar to the particle sizes of the matrix talc particles.

Summary of Eight Particle Size Measurement Results

Date	MAS No.	Chrysotile Length (μm)		
		Individual	Average	vs. Talc
2020-02-24 M70484	001-001	78.8	61.6	Same partcle size range as talc
	001-002	33.3		
	001-003	38.5		
	001-004	71.3		
	001-005	62.2		
	001-006	57.0		
	001-007	70.4		
	001-008	49.6		
	002-001	58.5		
	002-002	78.5		
	002-003	79.3		
2020-03-18 M71095	001-001	46.7	32.2	Same partcle size range as talc
	001-002	13.3		
	001-003	34.8		
	001-004	34.1		
2020-03-20 M70877	001-001	60.0	37.6	Same partcle size range as talc
	001-002	25.9		
	001-003	23.0		
	001-004	41.5		
2021-05-25 M71228	001-001	105.2	55.2	Same partcle size range as talc
	001-002	59.5		
	001-003	17.2		
	001-004	38.8		
2022-03-11 M71262	001-001	32.8	32.8	Same partcle size range as talc
	001-002	21.6		
	001-003	26.7		
	001-004	50.0		
2023-03-28 M71614	001-001	6.0	4.9	Same partcle size range as talc
	001-002	5.1		
	001-003	3.9		
	001-004	4.8		
2023-10-19 M71643	001-001	3.9	3.8	Same partcle size range as talc
	001-002	6.6		
	001-003	2.2		
	001-004	2.7		
2024-02-15 M71740	001-001	3.6	8.5	Same partcle size range as talc
	001-002	9.4		
	001-003	12.0		
	001-004	8.9		

Mineral	Minimum (μm)	Average (μm)	Maximum (μm)	Reference
Talc	1.5	9.3	37.0	MAS (2017)
SG-210 Chrysotile	3.0	8.0	10.0	MAS (2023)

The chrysotile particle sizes of the first three samples were measured and labeled by MAS.

The chrysotile particle sizes of the other five samples were measured in reference to MAS's scale bars.

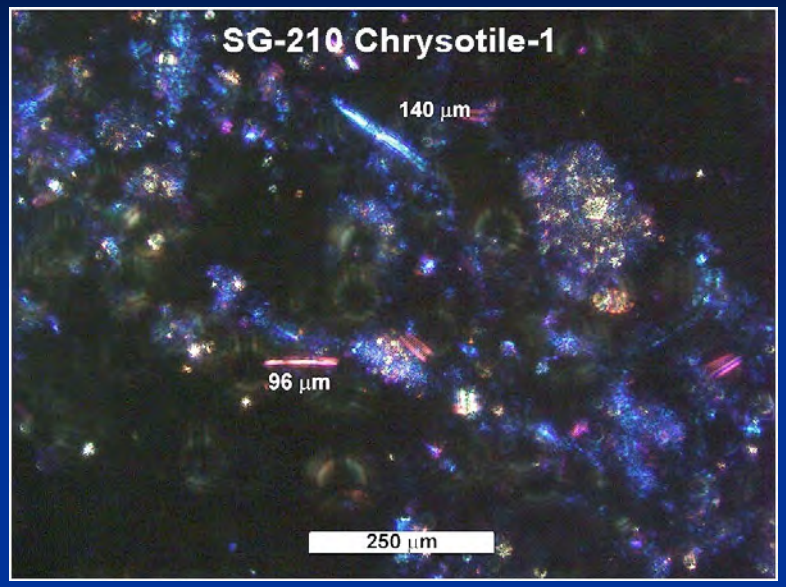
None of them conforms to MAS's data in the above table.

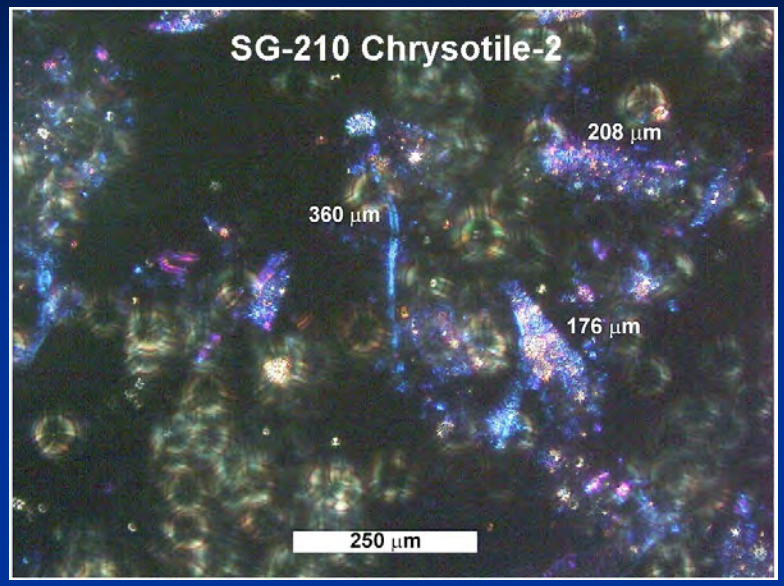
The particle size range of every chrysotile particle is the same as the matrix talc particles.

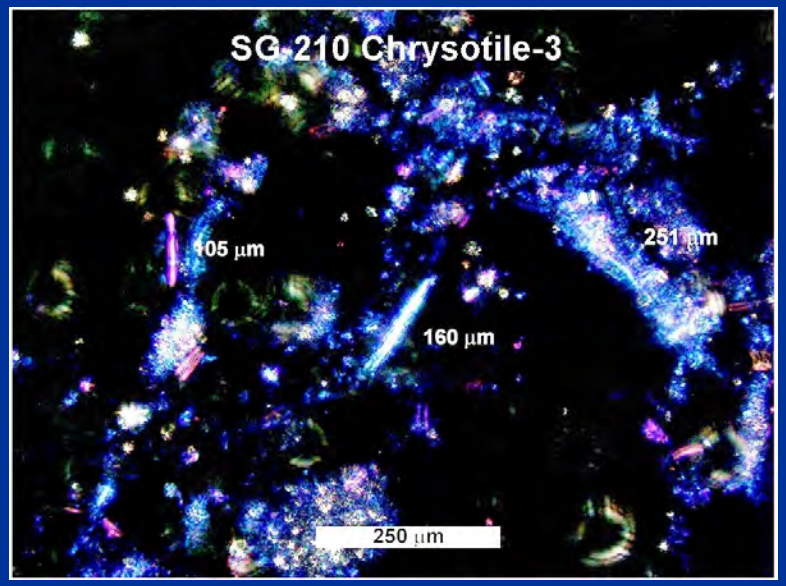
There is a great degree of inconsistency in "chrysotile" particle sizes reported by MAS over the last five years.

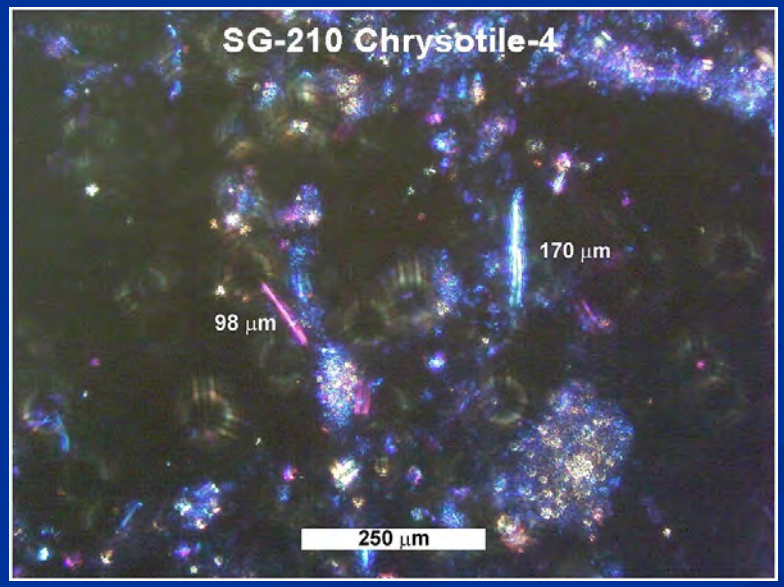
The only conclusion is that MAS is NOT capable of fixing this systematic error because MAS lacks the ability to perform the most fundamental particle size measuring procedure by PLM.

MAS Misidentified Talc as Chrysotile
Evidence # 2 – Particle Size









These four images show that Calidria chrysotile structure lengths could be hundreds of micrometers much longer than the 37 micrometers of the SG-210 maximum length reported by MAS.

Tensile Strength of Chrysotile

Structural features of natural and acids modified chrysotile nanotubes

Myroslav Sprynskyy [a], Janusz Niedojadło [b], Bogusław Buszewski [a]

ELSEVIER Chemistry of Solids
Volume 72, Issue 9, September 2011, Pages 1015-1026

Structural features of natural and acids modified chrysotile nanotubes

They are stronger than steel, highly tolerant of corrosion and much cheaper than synthetic fibers. The measured tensile strength of chrysotile fibers has been reported in the range 1.1–4.4 GPa [29].

1.1 to 4.4 GPa or 159,000 – 638,000 Psi

Sprynskyy, M. et. al. (2011) Structural features of natural and acids modified chrysotile nanotubes. Journal of Physics and Chemistry of Solids. Volume 72, Issue 9. Pages 1015-1026. https://doi.org/10.1016/j.jpcs.2011.05.013.

They are stronger than steel, highly tolerant of corrosion and much cheaper than synthetic fibers. The measured tensile strength of chrysotile fibers has been reported in the range 1.1-4.4 Gpa.
Conclusions: The raw chrysotile is presented by bundles of fibers about 50–10 micrometers in size, which are able to splitting with generation of thinner bundles up to one micrometer. The outer diameters of individual nanotubes vary from 15 to 30 nm, while the inner diameters range from 2 to 6 nm. The single chrysolite fibers are presented by cylindrical nanotubes of various forms: rectilinear cylinders (the most widespread), cylinders with cup-like ends, cylinder-in-cylinder and cone-in-cone tubes.

Tensile Strength of Talc

Home > Journal of Packaging Technology and Research > Article

Optimization of Tensile Strength and Shrinkage of Talc-Filled Polypropylene as a Packaging Material in Injection Molding

Research Article
Published: 23 November 2019
Volume 4, pages 69–78, (2020)
Cite this article

Journal of Packaging Technology and Research

Aims and scope →

Submit manuscript →

Abstract

shrinkage of injection-molded TFPP parts under the same molding condition. With the Taguchi optimization approach, it turned out that the tensile strength was increased from 22.07 to 24.40 MPa and the shrinkage was reduced from 3.25 to 2.28%. The optimizing approach and the

2.33 MPa or 338 Psi

Syed, S.F., Chen, J.C. & Guo, G. (2020) Optimization of Tensile Strength and Shrinkage of Talc-Filled Polypropylene as a Packaging Material in Injection Molding. J Package Technol Res 4, 69–78. https://doi.org/10.1007/s41783-019-00077-6

Tensile Strength of Hemp Fibers

Fiber	Tensile strength (MPa)	Young's modulus (GPa)	Density (g cm^{-3})	Refs
Cotton	330–585	4.5–12.6	1.5–1.54	119
Flax	345–1035	27.6–45.0	1.43–1.52	119
Hemp	690–1000	50.0	1.47–1.50	119
Jute	393–800	13–26.5	1.3–1.45	82
Silk	650–750	16	1.3–1.38	82
Kenaf	930	53.0	1.5	119
Ramie	400–1000	61.5	1.5–1.6	119
Sisal	511–635	9.4–15.8	1.16–1.5	119
Banana	500–700	7–20	1.4	120
Softwood	100–170	10–50	1.4	120
Hardwood	90–180	10–70	1.4	120
E-glass	1800	69.0–73.0	2.5	119
HM carbon	2400	380	1.95	121,122
HS carbon	3400	230	1.75	121,122
Kevlar 49	3000	130	1.45	121,122

HM: high modulus, HS: high strength.

690 – 1,000 MPa or 100,050 – 145,000 Psi

Shubhra, T.H. et. al., (2011). Mechanical properties of polypropylene composites: a review. J Thermoplast Compos. 26. 362-391. https://doi.org/10.1177/0892705711428659.

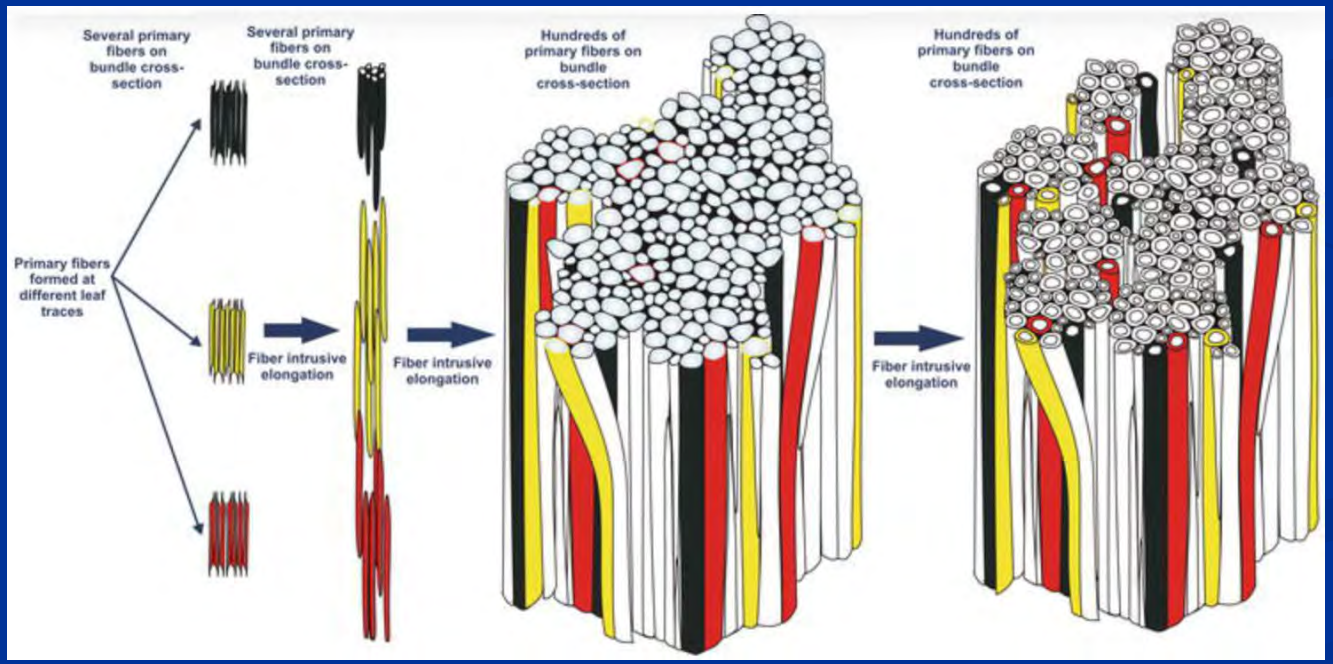
Hemp fiber's tensile strength is slightly lower than chrysotile

Structure of Hemp Fibers

690 – 1,000 MPa or
100,050 – 145,000 Psi

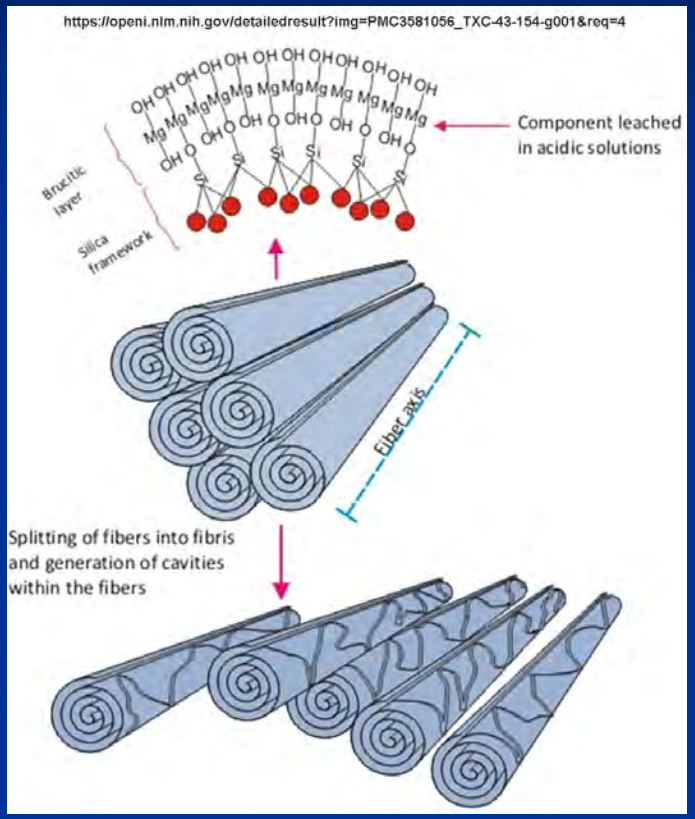
Zhao, S. et. al. (2021) The Physical and Chemical Properties of Hemp Fiber Prepared by Alkaline Pectinase-Xylanase System. https://doi.org/10.21203/rs.3.rs-451112/v1.

Hemp fiber's microtube structure resembles chrysotile

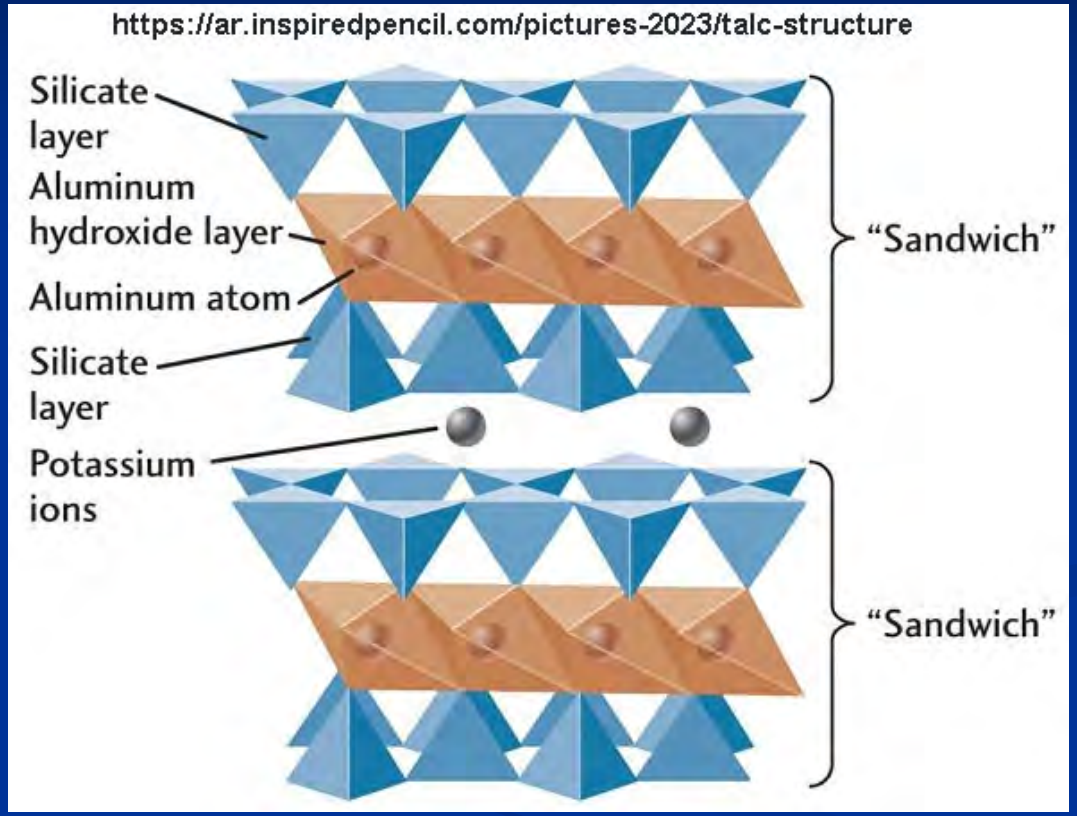


Chrysotile and Talc Are Drastically Different in Tensile Strength

Chrysotile $Mg_3Si_2O_5(OH)_4$



Talc $Mg_3Si_4O_{10}(OH)_2$

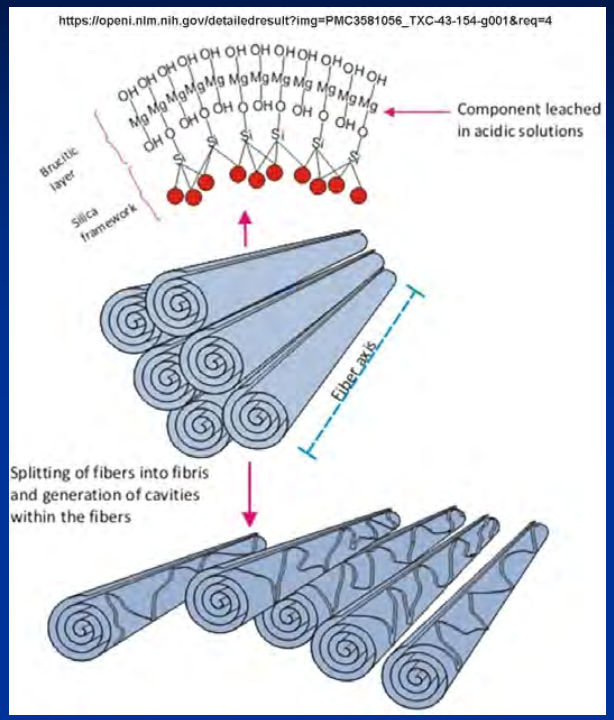


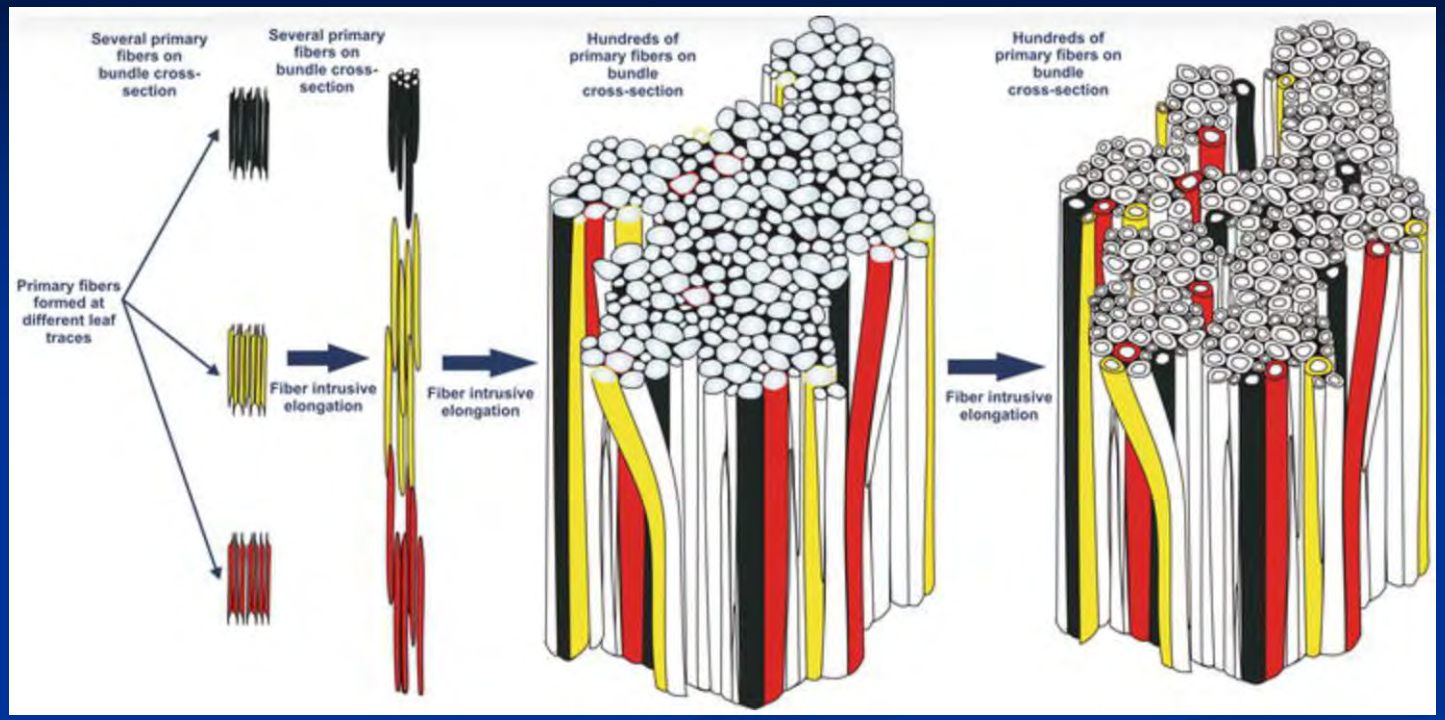
The nanotube structure makes the chrysotile even stronger.

Bonding is weak between and within TOT layers, making talc easily crushable.

Chrysotile's tensile strength is more than 30 times that of talc. With such a high tensile strength, chrysotile does not break down into 325 mesh-size or < 44 μm particles in the milling process of talc.

Chrysotile and Hemp Fiber Are Similar in Tensile Strength





- **The hemp's microtube structure is similar to the nanotube structure of chrysotile, making it also very strong.**
- **Their tensile strengths are similar.**
- **Both are used as the reinforcement components of composite materials**

How Strong Are Chrysotile and Hemp Fiber?

The strong chrysotile fibers are used for various applications.

The strong hemp fibers are used for the construction composite materials.

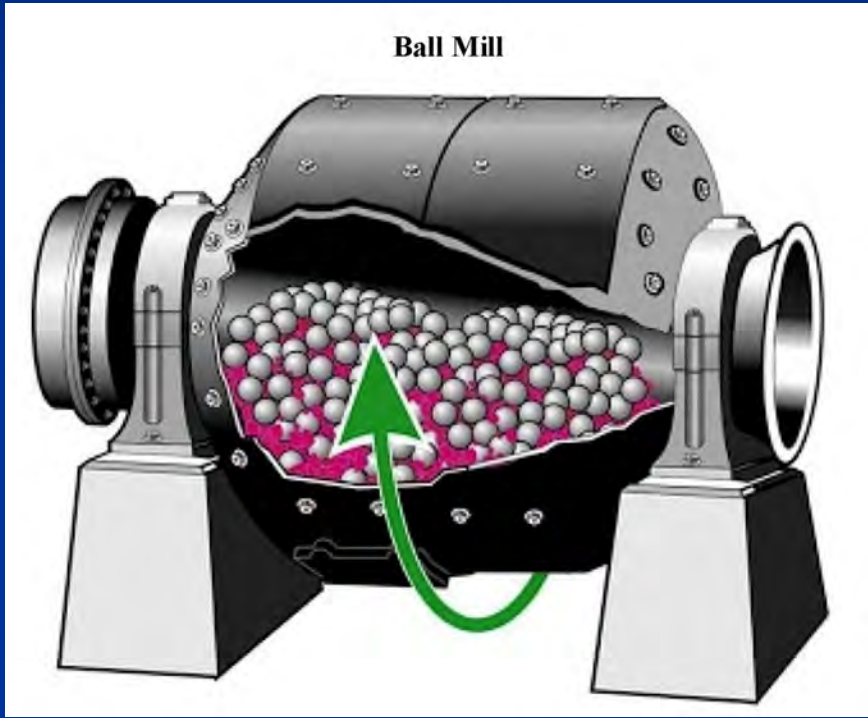
How These Materials Behave During Mechanical Grinding?

Their high tensile strength and strong bonding make them hard to break into fine powders.

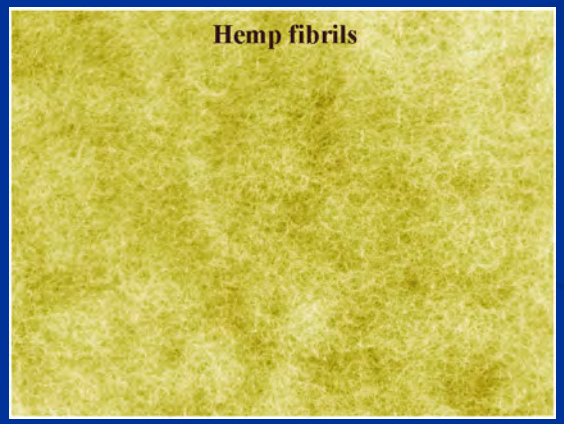
Their softness and weak bonding make them easily break into fine powders.

When Crystal Sugar and Hemp Fibers Are Ground Together

If hemp fibers and sugar crystals are ground together



The same is true for talc and chrysotile. USP's research work has proven it.



Hemp fibers are crushed and broken into fibrils, but not into fine powders like sugar crystals.

Sugar crystals quickly break into fine powders

USP's experts have conducted extensive research on the topic of asbestos-containing talc.

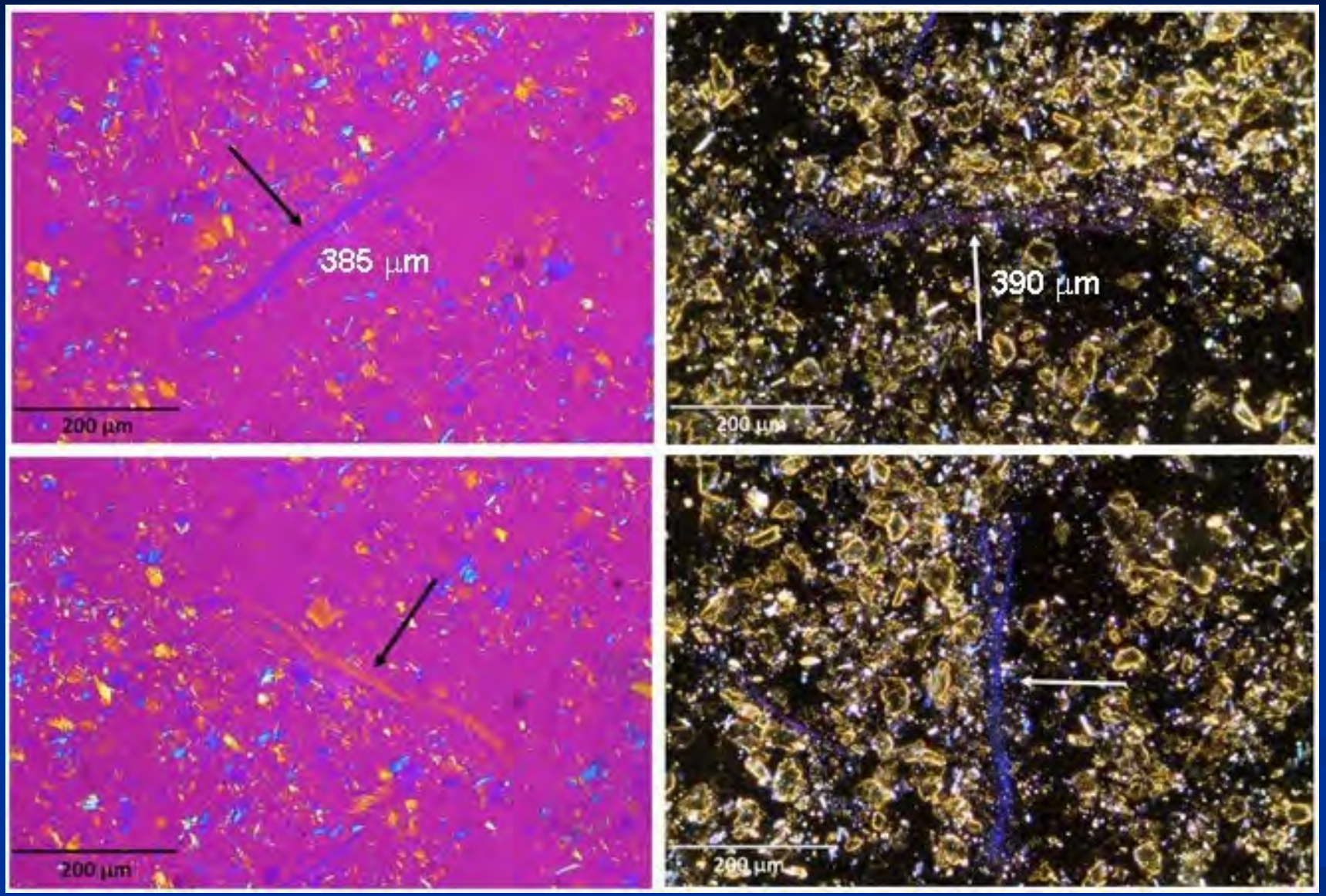
They wanted to find out how the finished talcum baby powder product should look if the raw talc material contained asbestos.

They spiked an asbestos-free talc sample with asbestos minerals chrysotile and tremolite from NIST SRM 1866 at different concentration levels.

To mimic the baby powder manufacturing process, they ground the asbestos-spiked talc sample inside a balling mill until the talc's particle size reached the commercial specification of the finished baby powder product: under 44 micrometers.

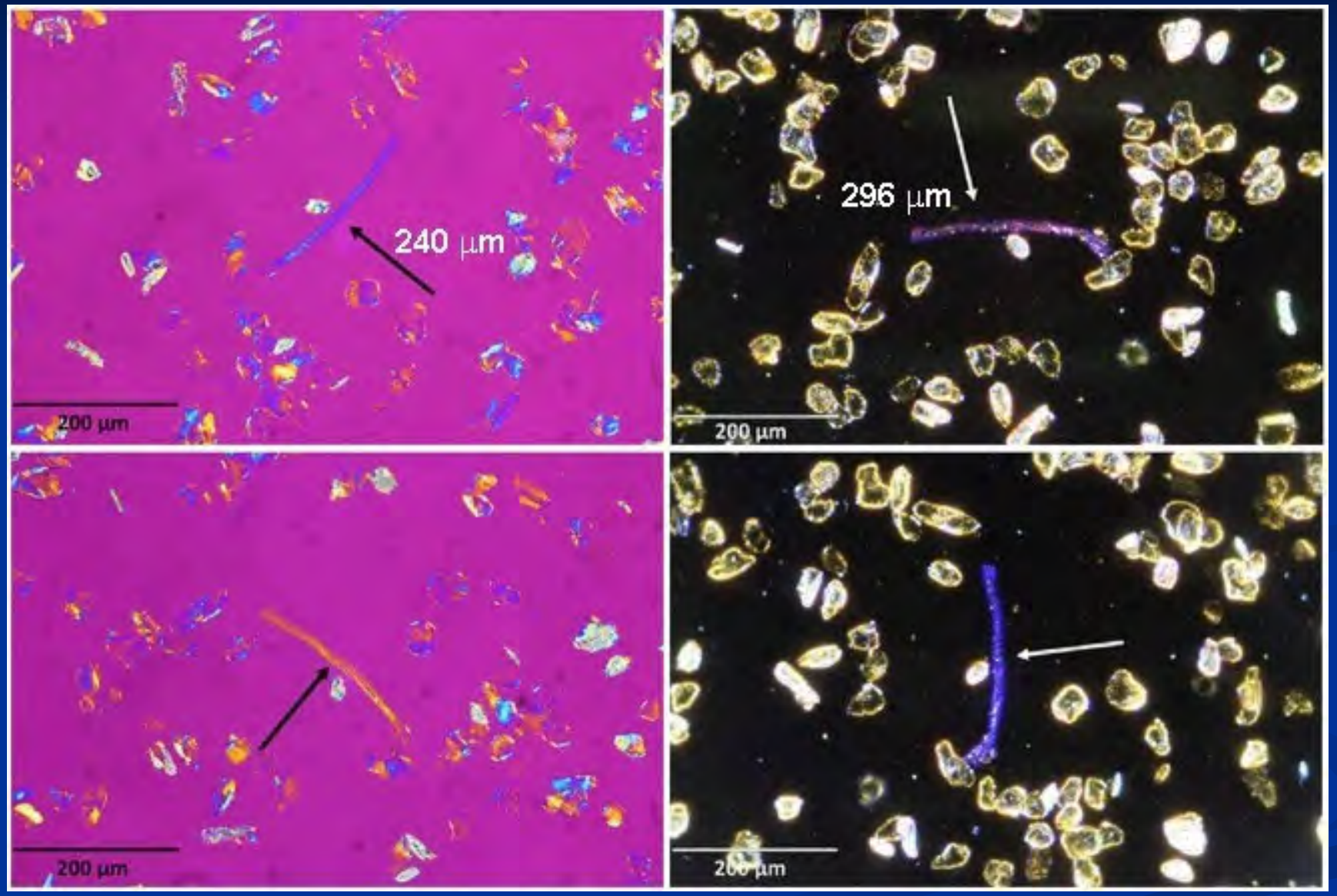
USP's experts studied the finished baby powder samples using various microscopic techniques. The following are pictures taken under optical microscope.

NIST Standard Chrysotile in Talcum Powder (USP, 2022)



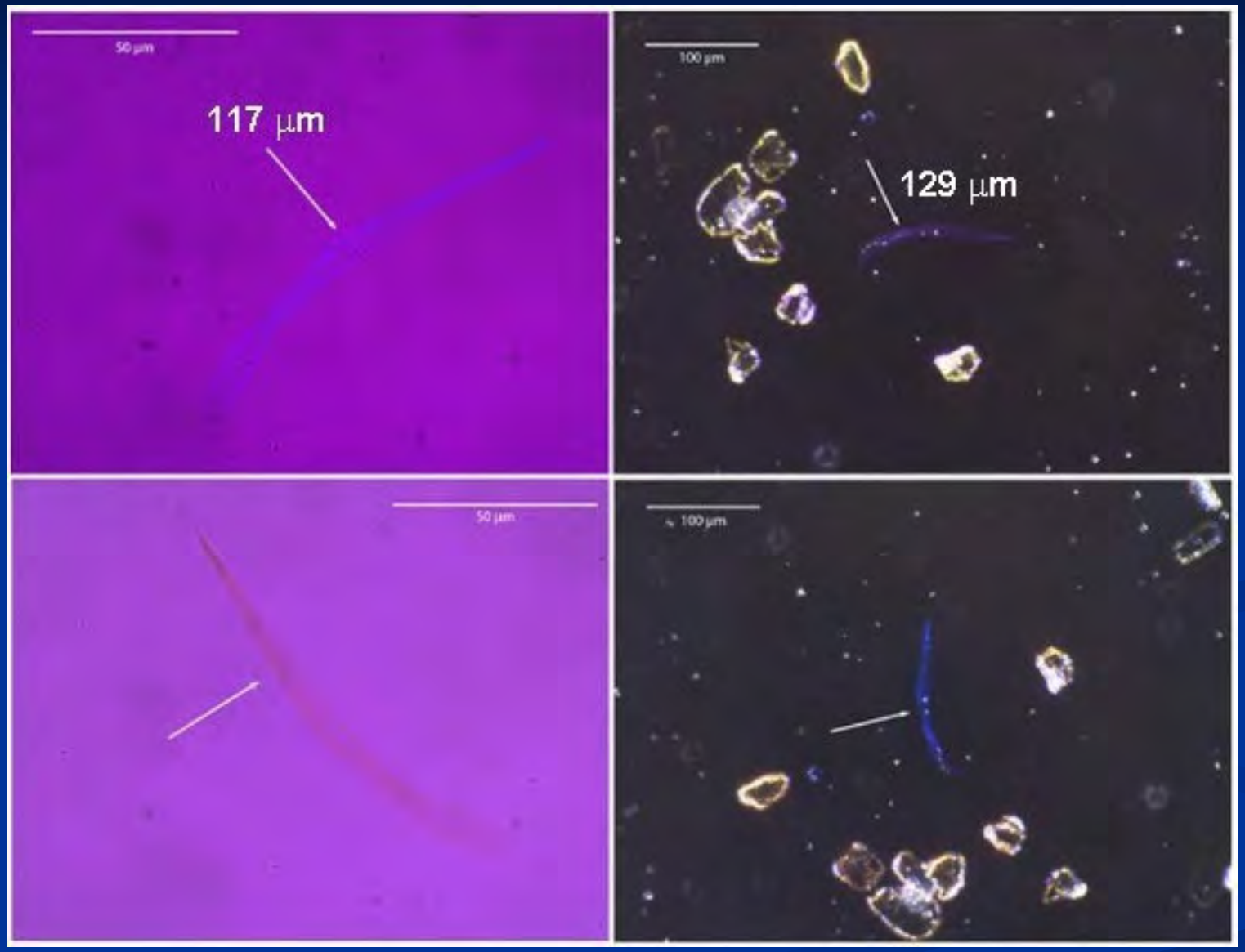
0.1% standard Chrysotile-spiked talc. Chrysotile fibers' lengths are much longer than talc particles.

NIST Standard Chrysotile in Talcum Powder (USP, 2022)



0.01% standard Chrysotile-spiked talc. Chrysotile fibers' lengths are much longer than talc particles.

NIST Standard Chrysotile in Talcum Powder (USP, 2022)

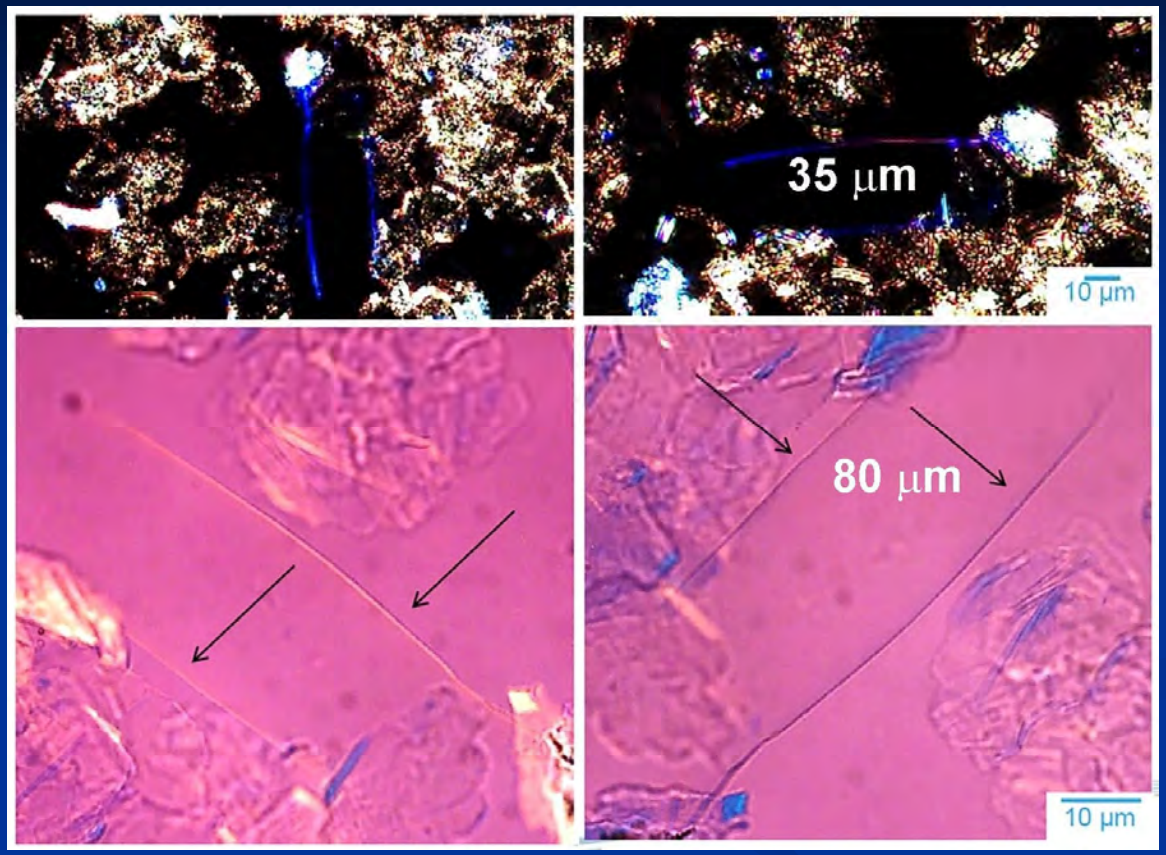


0.001% standard Chrysotile-spiked talc. Chrysotile fibers' lengths are much longer than talc particles.

Calidria Chrysotile in Talc Powder Samples

The above are all NIST standard chrysotile.
How about Calidria chrysotile?

Calidria Chrysotile in Talcum Powder (Pier, 2017)



0.05% Calidria chrysotile-spiked talc powder under PLM.
After talc is ground into the baby powder particle sizes (325 mesh or < 44 μm),
There are still longer (80 mm) Calidria chrysotile in the sample.

Conclusions Derived from the Above Evidence

- **The minute amount (e.g. 0.0003 – 0.0006%) of chrysotile found in J&J baby powder products by MAS must have been formed together with talc during the geological formation process. When the raw talc rock ore is used to produce baby powder products, the chrysotile is ground together with talc in balling mills.**
- **Because of its extremely high tensile strength chrysotile crystals do not break down to the same particle size range as talc crystals. Therefore, the particles of the same size as talc particles cannot be chrysotile.**

Dr. Shu-Chun Su's Analysis of MAS's Analytical Results

Incorrect Quantification Procedure

MAS's Quantitation Procedure Defies Common Sense

REMOTE DEPOSITION OF WILLIAM E. LONGO, PhD
March 22, 2024

Page 150

So, okay, well, let's -- and that's why the SG-210 is so valuable because it's about the same size.

So then you take what the recovery is, you know, and then you can calculate what -- all our reports will have a weight corrected, that's the measurement of the difference between the heavy fraction and the light fraction.

Q. And the percentage reporting, is that like a qualitative visual estimate from what the analyst is seeing on the slides as opposed to a quantitative calculation when I look at that, your PLM reports on chrysotile on Johnson & Johnson samples?

A. Yes. There's only two ways that you can do the estimated weight percent. You can do point counting, which we don't do because we found it not very accurate, but you have a visual estimate of the percentage you're seeing and that's what you write down, and it's usually a range.

Q. Okay. That's what your laboratory does, this sort of visual estimate of what you're seeing in terms of area by a percent basis, right?

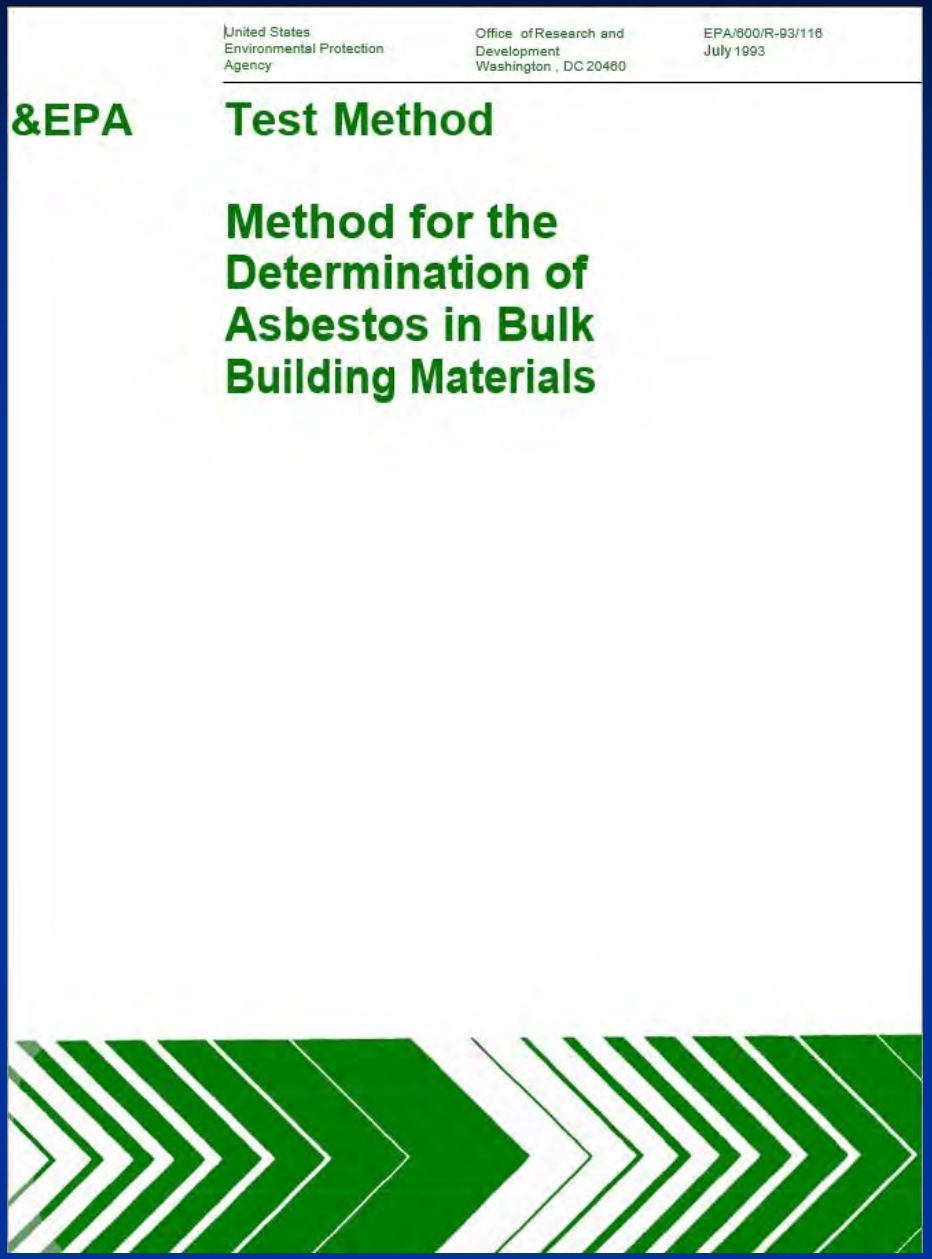
A. Right.

Q. Okay. And then when I see -- you know, when you report that in terms of chrysotile bundles per gram, the way that you calculate that number for

Priority-One Court Reporting Services Inc. – A Veritext Company
718-983-1234

In Dr. Longo's deposition on March 22, 2024 he claims that EPA's Point Counting is not very accurate and used Visual Estimate for quantitation

MAS Did Not Follow EPA's Quantitation Procedure



United States Environmental Protection Agency | Office of Research and Development Washington, DC 20460 | EPA/600/R-93/116 July 1993

&EPA

Test Method

Method for the Determination of Asbestos in Bulk Building Materials

Baby powder is a friable material.

This Latin adjective comes from the verb "friare," which means "**to crumble**." "Friare" in turn is related to the verb "fricare" ("to rub"), the source of the English noun "friction." "Friable" is used to describe something that can be easily reduced to a powdered form. In contemporary usage, it is often found in the discussion of asbestos.

Friable Definition & Meaning - Merriam-Webster

Point counting quantitation is required by U.S. EPA (1982) EPA-600-82-020 Interim method for the determination of asbestos in friable materials.

1.7.2.4 Quantitation of Asbestos Content

Asbestos quantitation is performed by a point-counting procedure.

MAS did not follow the official EPA 600 M4 82-200 point counting procedure for quantitation of asbestos content in friable materials.

Reference Chart for Visual Estimate (Su, 2022)

THE MICROSCOPE
Vol. 69:4, pp 160–162, 2022
https://doi.org/10.59082/RPCG4507

Area Percentage Charts to Aid Visual Estimation of Asbestos Concentration in Bulk Asbestos Samples

Shu-Chun Su, Ph.D.
Technical Expert, National Voluntary Laboratory Accreditation Program
National Institute of Standards and Technology

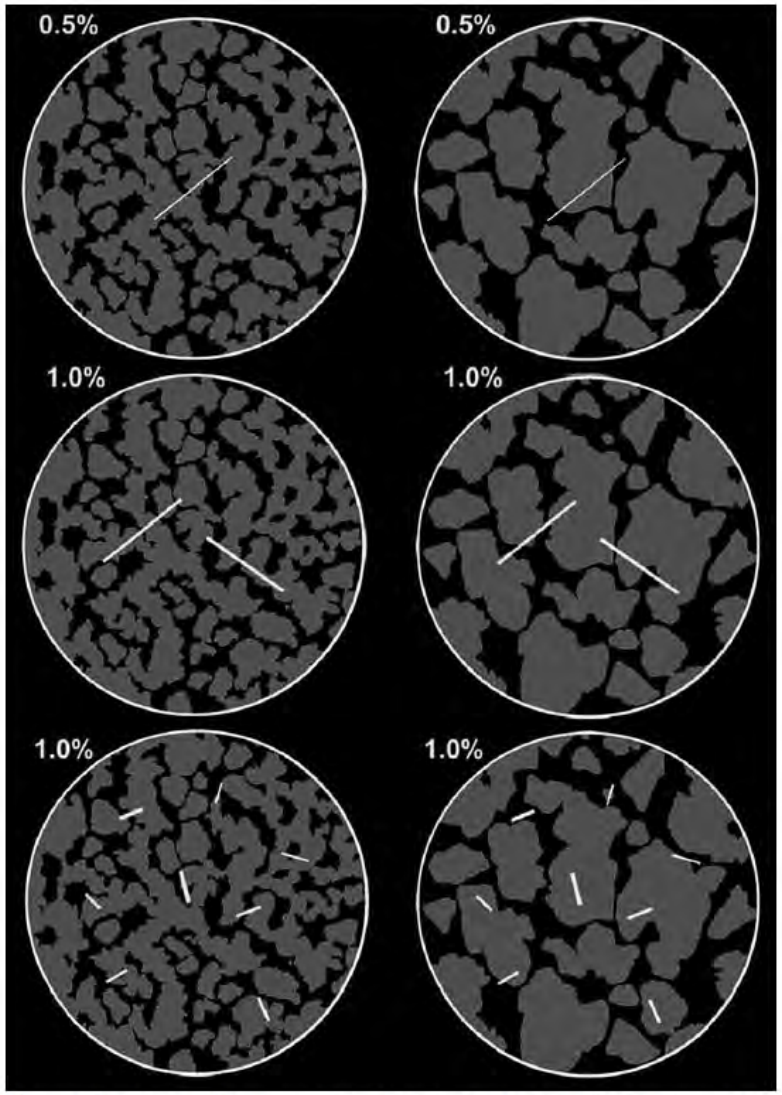


Figure 3. 0.5–1.0% with 65% of the field of view filled with matrix.

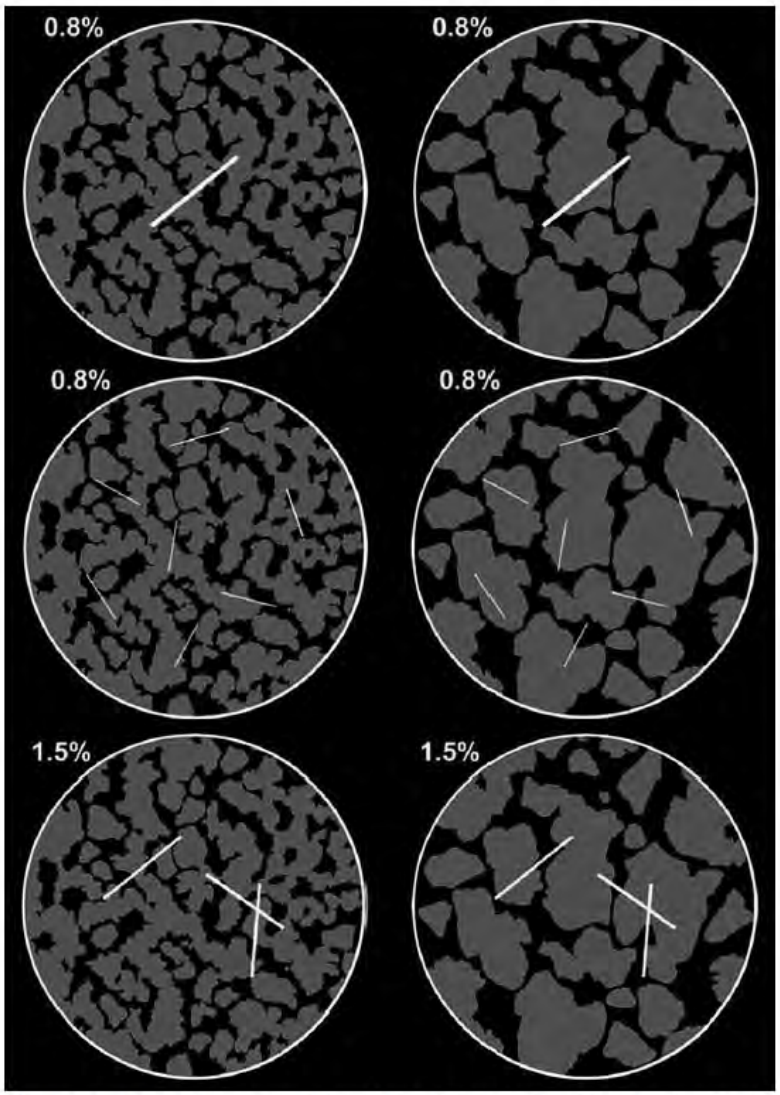
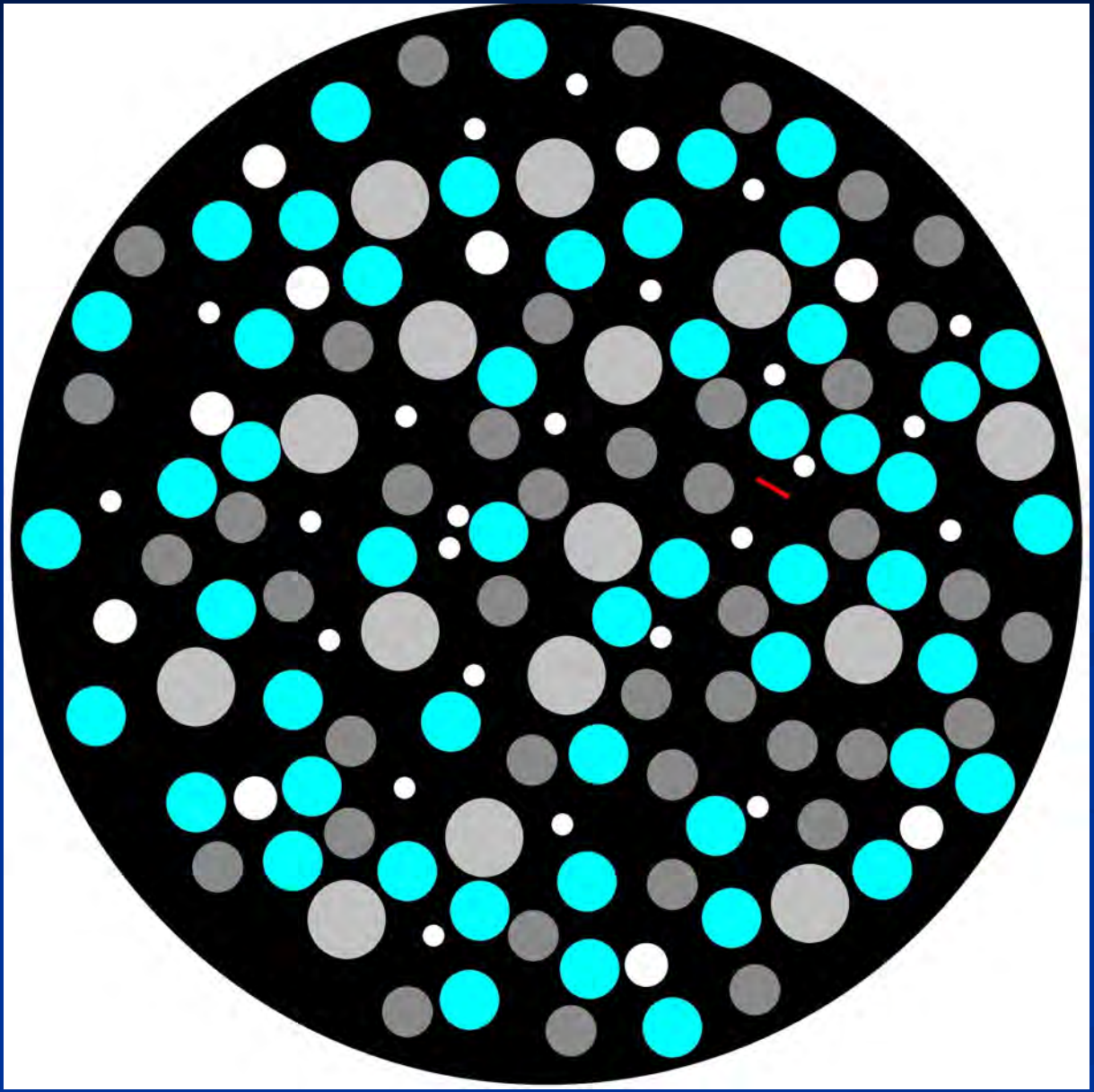


Figure 4. 0.8–1.5% with 65% of the field of view filled with matrix.

These are the asbestiform reference charts at 0.X% to meet AHERA requirement for differentiating ACM (asbestos containing material) from Non-ACM. The differentiating factor is 1% by weight:

ACM > 1%
Non-ACM ≤ 1%
These charts have been widely used by US asbestos laboratories and were formally published in 2022 by Shu-Chun Su.

Can the Asbestos % in the Image be Visually Estimated?



The red fiber is asbestos. The round objects are talc particles.

There is no established analytical protocol to do Visual Estimate at such low concentration levels.

Can 0.002 – 004% Be Visually Estimated?

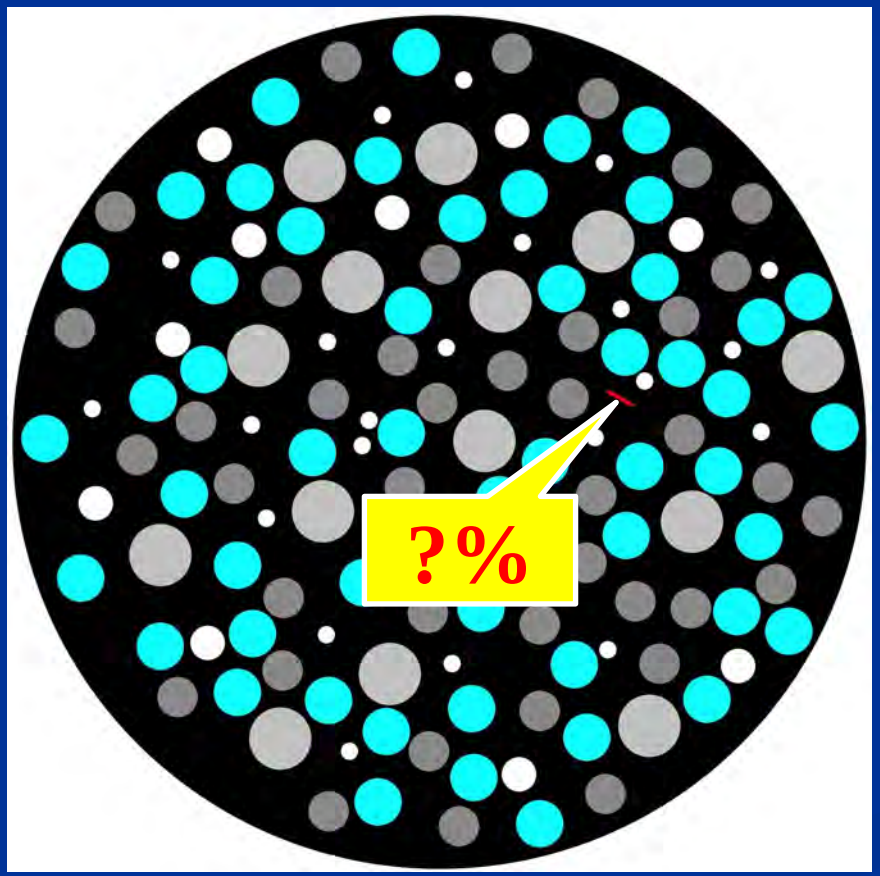
2023-02-28 - Valadez Bottle Report

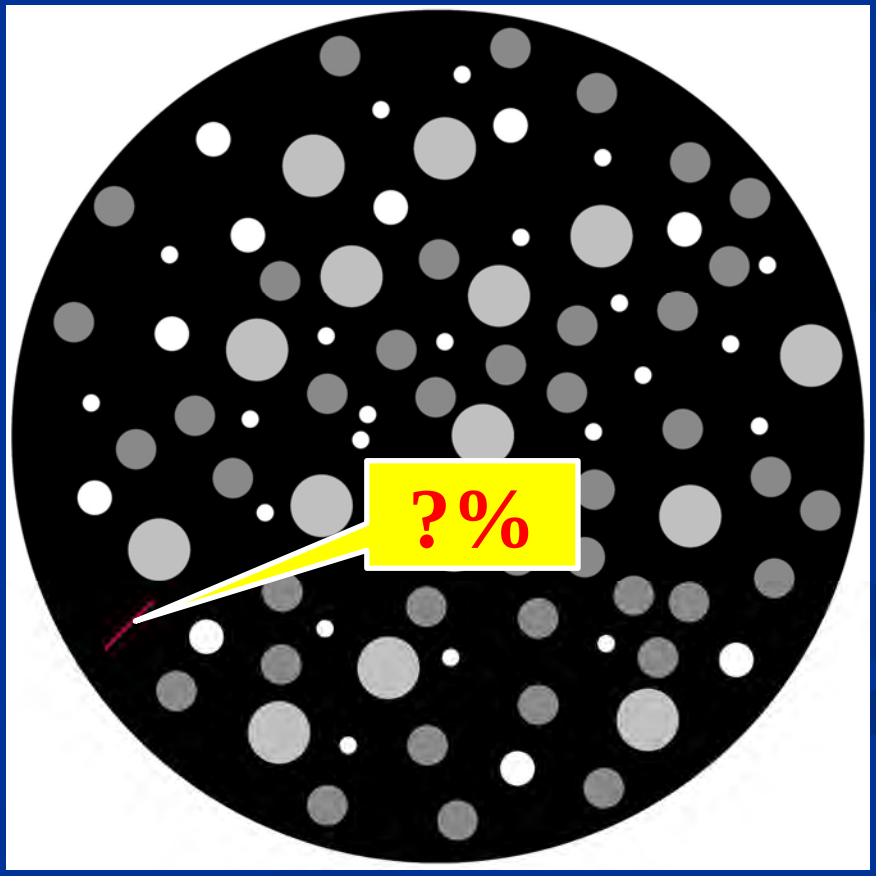
Table 2
Overall Summary of the JBP Asbestos Sample Analysis Results

MAS Sample #	ATEM Amphibole Asbestos	ISO-NY PLM Wt. % Amphibole Asbestos	CSM-PLM w/o HLS Chrys %	CSM Weight Recovery Light fraction	CSM Chrys % Weight Corrected**
M71614-001	<52,000	NSD	0.002-0.004	15.8%	0.0003-0.0006

*NSD: No Structure Detected **Weight Corrected

- According to Dr. Longo's March 22, 2024 deposition, the 0.002 – 004% CSM-PLM w/o HLS Chrys% was visually estimated.
- Can anyone visually estimate the red fiber's percentages among the matrix round objects?

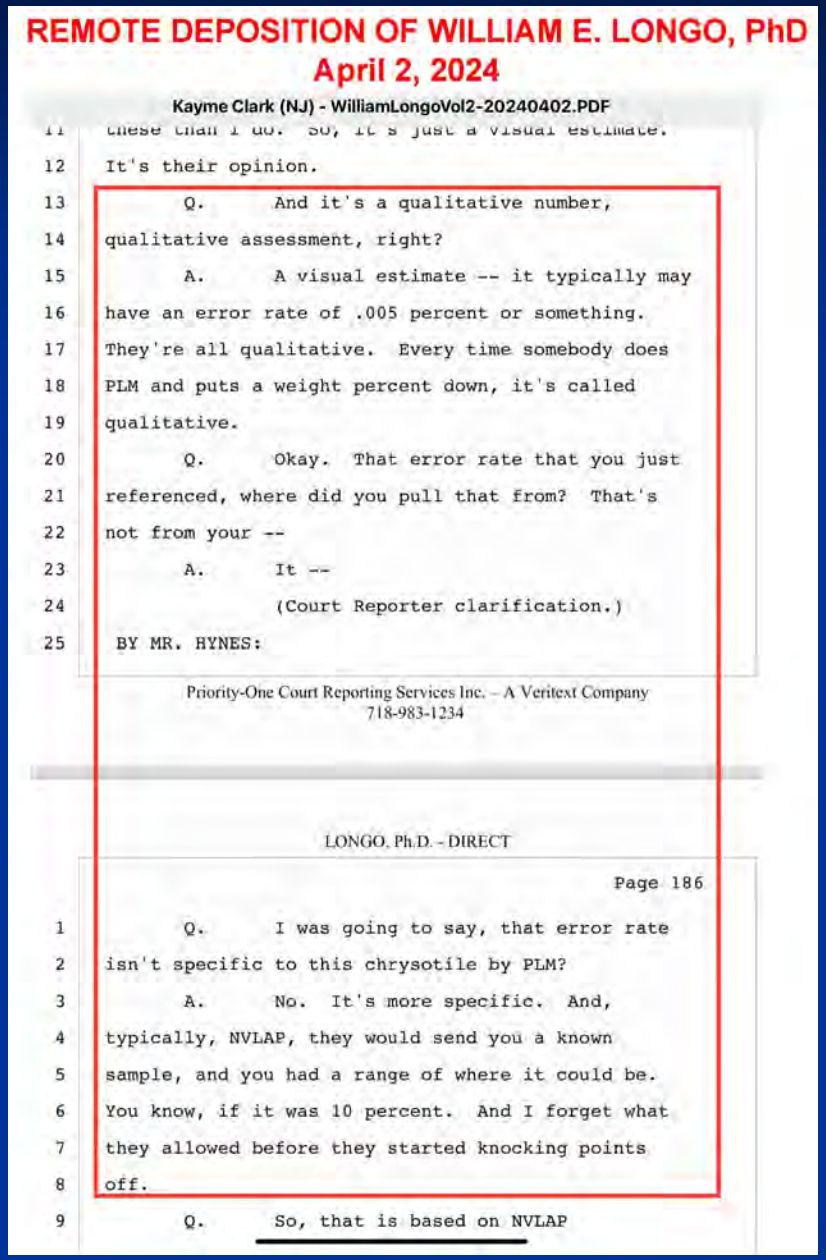




Dr. Shu-Chun Su's Analysis of MAS's Analytical Results

Impossible Error Rate of Visual Estimate

MAS's 0.005% Error Rate Defies Common Sense



REMOTE DEPOSITION OF WILLIAM E. LONGO, PhD
April 2, 2024

Kayme Clark (NJ) - WilliamLongoVol2-20240402.PDF

these than I do. So, it's just a visual estimate.
It's their opinion.
Q. And it's a qualitative number, qualitative assessment, right?
A. A visual estimate -- it typically may have an error rate of .005 percent or something. They're all qualitative. Every time somebody does PLM and puts a weight percent down, it's called qualitative.
Q. Okay. That error rate that you just referenced, where did you pull that from? That's not from your --
A. It --
(Court Reporter clarification.)
BY MR. HYNES:

Priority-One Court Reporting Services Inc. – A Veritext Company
718-983-1234

LONGO, Ph.D. - DIRECT

Page 186

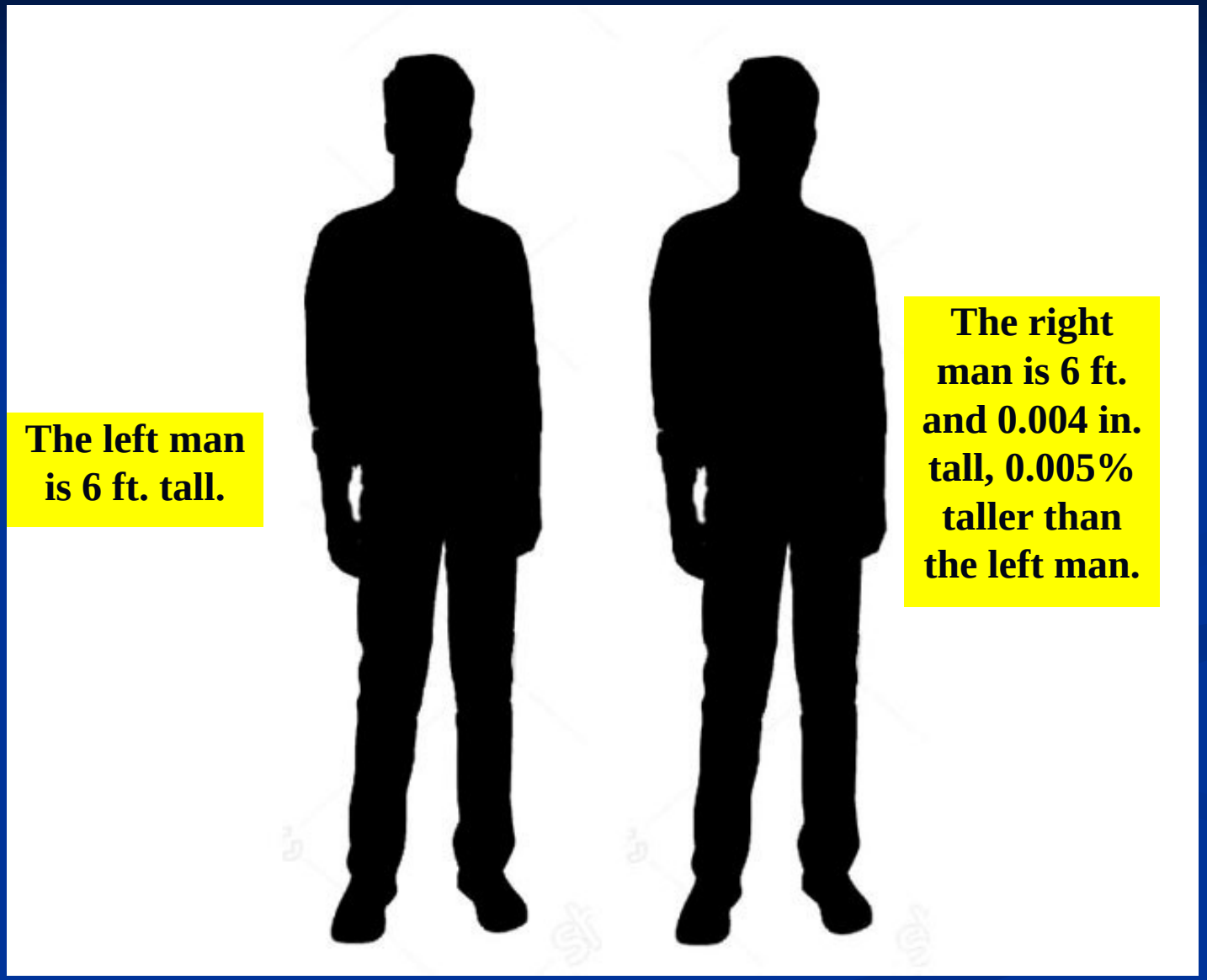
Q. I was going to say, that error rate isn't specific to this chrysotile by PLM?
A. No. It's more specific. And, typically, NVLAP, they would send you a known sample, and you had a range of where it could be. You know, if it was 10 percent. And I forget what they allowed before they started knocking points off.
Q. So, that is based on NVLAP

In Dr. Longo's April 2, 2024 deposition, he claimed that MAS's typical error rate of Visual Estimate was 0.005%

It is not qualitative but quantitative.

NVLAP's acceptable error rate of Calibrated Visual estimate or CVE is a single-digit percentage, for example, ± 5%, not an error rate at the third decimal place.

The 0.005% Error Rate of Visual Estimate Defies Common Sense



Can a human being visually tell the difference that the right man is taller by 0.004 inches? No.

Dr. Shu-Chun Su's Analysis of MAS's Analytical Results

Incorrect Extrapolation Procedure.

MAS's Analytical Results of J&J Talcum Powder

Valadez J & J Baby Powder Container

MAS's Analytical Results of J&J Talcum Powder

2023-02-28 Valadez Bottle Report

Table 2
Overall Summary of the JBP Asbestos Sample Analysis Results

MAS Sample #	ATEM Amphibole Asbestos	ISO-NY PLM Wt. % Amphibole Asbestos	CSM-PLM w/o HLS Chrys %	CSM Weight Recovery Light fraction	CSM Chrys % Weight Corrected**
M71614-001	<52,000	NSD	0.002-0.004	15.8%	0.0003-0.0006

*NSD: No Structure Detected **Weight Corrected

Table 3
Overall Summary of the Calculated Chrysotile
BIR CSM-PLM Data
(RI Fluid 1 650)

MAS Sample #	Chrysotile RI Values CSM-PLM	Birefringence Calculations
M71614-001	1.568-1.564 1.564-1.557	0.004-0.007 avg. = 0.006
	α range γ 1.564-1.557 1.568-1.564	Avg. = 0.006

Table 6
Chrysotile
Range of Parallel and Perpendicular RIs

Chrysotile Bundle No.	RI Fluid	CSM PLM (with HLS) Parallel RI	CSM PLM (with HLS) Perpendicular RI	BIR Calculations γ - α
M71614-001	1.560			
1		1.564	1.561	0.003
2		1.565	1.561	0.003
3		1.568	Avg. 1.559	0.009
4		Avg. 1.567	Avg. 1.562	0.005
		Avg. 1.566	Avg. 1.561	0.005

Estimation of the Number of Chrysotile Bundles Detected for CSM PLM Methods

Using the number of chrysotile bundles counted during the PLM analysis, and the amount of talcum powder analyzed in a specified area on the cover slip mount per the two glass slides, the amount of chrysotile bundles per gram of talcum powder sample can be calculated.

Total chrysotile bundles in the sample is calculated as shown in the following equation:

$$(A1 \div A2) \times (CB) \div W = TCB/W$$

Where:
A1: The total area (972 mm²) that the talcum powder occupies on the two glass slides.
A2: The area (23.56 mm²) in thirty fields of view that the talcum powder occupies on the two glass slides.
CB: Number of chrysotile bundles detected in a positive sample by PLM analysis.
W: Weight of total talcum powder placed on the two glass slides.
TCB/W: Total number of chrysotile bundles per weight (grams) of talcum powder.

The results of CSM sample preparation analysis calculations are shown in Table 4.

Table 4
Summary of Estimated Chrysotile Bundles per gram Calculations
For the CSM PLM Results

MAS Sample #	wt. of sample grams	No. of Chrys Bundles counted	CSM/ISO Chrysotile Bundles/g	CSM/ISO* Chrysotile Bundles/g
M71614-001	0.0007	6	354,000	56,000*
			Avg. = 354,000	Avg. = 56,000*

Weight corrected*

MAS's Conclusions

- **This baby powder contains 0.0003 – 0.0006% of chrysotile.**
- **Each gram of talc contains 56,000 chrysotile bundles.**

MAS PLM Extrapolation Procedure Is Unpublished, Unvalidated, Unreliable, and Not Scientifically Justified

Estimation of the Number of Chrysotile Bundles Detected for CSM PLM Methods

Using the number of chrysotile bundles counted during the PLM analysis, and the amount of talcum powder analyzed in a specified area on the cover slip mount per the two glass slides, the amount of chrysotile bundles per gram of talcum powder sample can be calculated.

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MAS Sample #	wt. of sample grams	No. of Chrys Bundles counted	CSM/ISO Chrysotile Bundles/g	CSM/ISO* Chrysotile Bundles/g
M71614-001	0.0007	6	354,000	56,000*
			Avg. = 354,000	Avg. = 56,000*

Weight corrected*

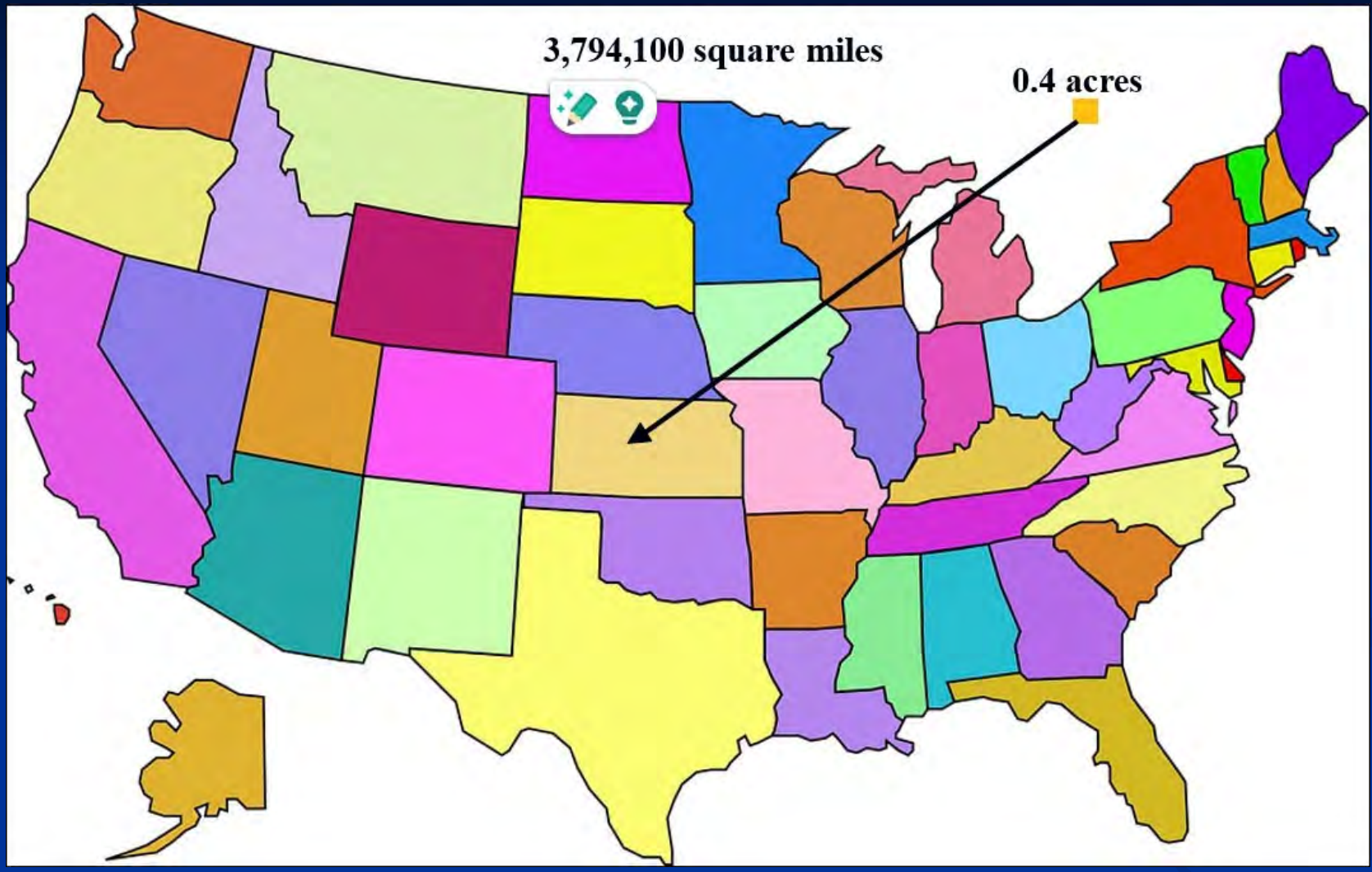
Out of a 1.5 oz. container, MAS separated out 0.0007 grams of talc powder for analysis.

Out of the 0.0007 grams sample, Only 2.4% or 0.000017 grams was actually counted.

Based on the counting results of the 0.000017-gram sample, MAS concluded that one gram of talc powder contains 56,000 chrysotile bundles.

The results of 0.000017 grams were extrapolated to 1 gram of talc powder. The extrapolation factor is 58,824 times!

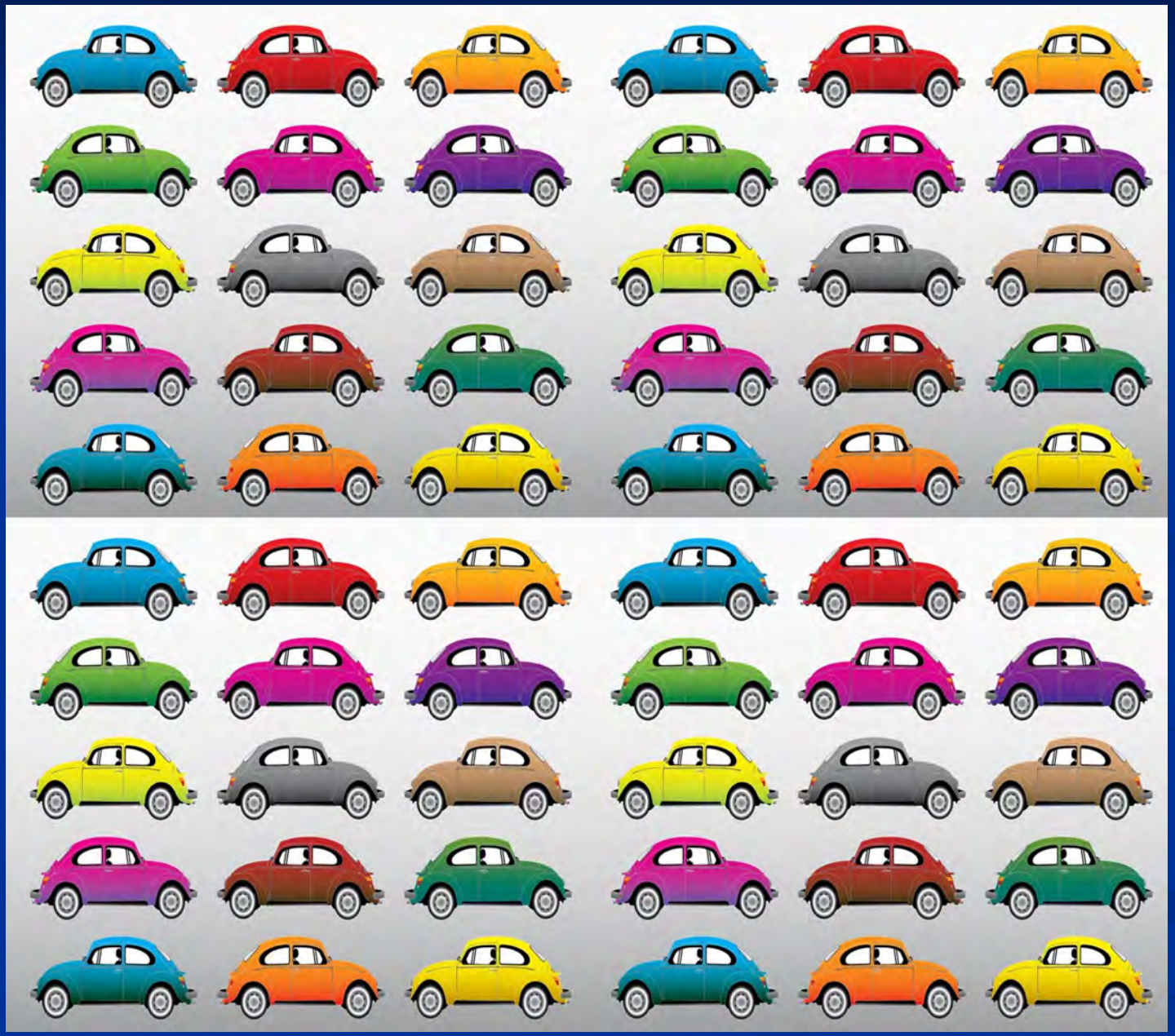
0.000017-Gram PLM Results Extrapolated to 1 Gram of Talc



The total area of the United States is three million seven hundred ninety-four thousand one hundred square miles. Using 0.000017-gram results to extrapolate to 1 gram of talc is like using a survey of the soil of a 0.4-acre backyard in a Kansas home to represent the soil of the whole United States.

0.000017-Gram PLM Results Extrapolated to 1 Gram of Talc

A motor vehicle plant produces 58.000 cars in a year.



Using the measurement results of 0.000017 grams sample to evaluate 1 gram of talc is like using the Quality Control check results of one vehicle to represent all 58,000 vehicles produced in a year. It is not an acceptable practice.

0.000017-Gram PLM Analysis is Far From Sufficient to Ensure a < 5% False Positive

- Any analytical procedure has errors. Asbestos analysis is no exception.
- There are two types of analytical errors: Type 1 – False Positive and Type 2: False Negative.
- For litigation-related analysis, the False Positive error rate must be kept under 5% or 1%
- In other words, the analytical procedure's Confidence Level (CL) must be at least 95% to ensure a < 5% False Positive error rate.
- In product liability analysis, a 95% CL test has a 5% probability of wrongly implicating an innocent product.
- MAS should pay more attention to the established sampling protocol and arbitrarily choose the amount of sample to be analyzed, which results in unacceptable False Positive rates.

A Sample Size of 0.000017-Grams is Far From Sufficient to Ensure a < 5% False Positive

Equation for Calculating Sample Size

$$n = p(1-p)\left(\frac{z}{E}\right)^2$$

where

- n – sample size that is large enough to attain the specified maximum allowed error and confidence level
- p – a rough estimate of population proportion (B%)
- E – MAE (maximum allowed error)
- z – critical value from normal distribution corresponding to the specified confidence level
  - $z = 1.96$ for 95% confidence level
  - $z = 2.575$ for 99% confidence level

Nate: 1. Given z and p, this equation can be used to calculate the margin of error associated with a specific n

2. The derivation of this equation is omitted in this presentation, which can be found in general probability/statistics texts

June 10, 2008 Shu-Chun Su: CARB M-435 22 of 40

All reliable methodologies require a sample size calculation to ensure a 95% Confidence Level and keep the False Positive error rate under 5%. Above is an example that I provided to the California Air Resources Board in 2008.
MAS did not perform any such calculation as part of its PLM methodology, which is scientifically inappropriate.

A Sample Size of 0.000017-Grams is Far From Sufficient to Ensure a < 5% False Positive

Equation for Calculating Sample Size

$$n = p(1-p)\left(\frac{z}{E}\right)^2$$

where

- n – sample size that is large enough to attain the specified maximum allowed error and confidence level
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June 10, 2008 Shu-Chun Su: CARB M-435 22 of 40

The above equation can be used to calculate the Confidence Level for known sample size, population proportion, and maximum allowed error. The Confidence Level of 2023-02-28 Valadez Bottle Report is far below 50%, making the False Positive error rate much greater than 50%. Such a False Positive error rate is totally unacceptable. A responsible laboratory will never adopt such a sampling scheme to make the False Positive error rate greater than 50%.

Dr. Shu-Chun Su's Analysis of MAS's Analytical Results

Internally Conflicting Quantification Results.

Internally Conflicting Quantification Results

2021-05-25 OTShelf JBP Purchased Argentina (M71228-001)

MAS reported 137,000 chrysotile bundles constituting a 0.005 – 0.006%wt. asbestos concentration.

Date of Report	2021-05-25
MAS No.	71228-001
Product	Argentina
Chrysotile %	0.005 - 0.006
Chrysotile Bundles per gram of baby powder	137000
Image of 71228-001 Chrysotile	p.39
Scale bar length (µm)	100
Length of Scale Bar on screen (pixel)	95.0
Chrysotile length on screen (pixel)	97.0
Chrysotile length (µm)	102.1
Chrysotile width on screen (pixel)	9.0
Chrysotile width (µm)	9.5
Chrysotile thickness (µm)	9.5
Single chrysotile volume (μm^3)	9164.02
Single chrysotile volume (mm^3)	0.0000091640
Total volume of chrysotile bundles (mm^3)	1.255470
Talc density (g/cm^3)	2.72
Volume of 1 gram chrysotile (cm^3)	0.368
Volume of 1 gram chrysotile (mm^3)	367.6
Percentage of chrysotile	0.34%

Table 2
Overall Summary of Off-The-Shelf JBP Container Sample Analysis Results

MAS Sample #	ISO-PLM w/o HLS Chrysotile %	Chrysotile Bundles Counted ISO	CSM/ISO-PLM with HLS chrysotile %	Chrysotile Bundles Counted CSM-ISO	Weight Recovery CSM-ISO	CSM/ISO-PLM with HLS chrysotile %
M71216-001	0.016-0.017	53	*0.022-0.023	70	24.2%	**0.005-0.006
M71216-002	0.009-0.012	33	0.014-0.015	48	21.4%	0.003
M71216-003	0.016-0.017	39	0.019-0.020	63	21.3%	0.004
	Range 0.009-0.017	Avg. 41 Bundles	Range 0.014-0.023	Avg. 60 Bundles	Avg. 22.3%	Range 0.003-0.006

*CSM chrysotile weight concentrations not weight corrected. **CSM chrysotile weight concentrations recovery corrected

Table 5
Summary of Estimated Chrysotile Bundles per gram Calculations for the JBP ISO & CSM PLM Results

MAS Sample #	ISO-PLM Wt of Sample Grams	No. of Chry Bundle counted	Chrysotile Bundles/g	Wt. of Sample in Grams	No. of Chry Bundles counted	Chrysotile Bundles/g
M71228 -001	0.0010	53	567,000	0.0010	70	749,000
M71228-002	0.0010	33	353,100	0.0010	48	514,000
M71228-003	0.0009	39	464,000	0.0011	63	613,000
	Avg. 0.0097	Avg. 42 Chry Bundles	Avg. 461,000	Avg. 0.00103	Avg. 60 chry Bundles	Avg. 625,000

Reported: 0.005 – 0.006; Calculated: 0.34%. Differing by 62 times.

The conclusion is that MAS's quantification results are NOT credible.

Dr. Shu-Chun Su's Analysis of MAS's Analytical Results

Inaccurate and Unreliable Sample Preparation Procedure.

Incorrect Sample Preparation Procedure

2020 - 2024 HLS Resaults

Date	MAS No.			Light Fraction %
2020-09-17	M71666	001	1	17.0
			2	14.6
			3	13.4
2021-05-25	M71216	001	1	24.2
			2	21.4
			3	21.3
2023-02-28	M71614	001	1	15.9
2023-10-19	M71643	001	1	19.7
2024-02-15	M71740	001	1	25.7

Since MAS's chrysotile concentration is at the 0.00x% level, talc is then at 99+% level.
If the Heavy Liquid Separation (HLS) sample preparation procedure was correctly performed, the Light Fraction would be < 1%.
MAS's two-digit Light Fraction results clearly indicate that MAS was NOT capable of correctly performing the HLS sample preparation procedure.

Summary of Deficiencies of MAS's Analytical Procedures

- **Inability to ensure a 95% Confidence Level of quantification.**
- **Inability to correctly interpret dispersion staining colors.**
- **Inability to calibrate dispersion staining colors.**
- **Inability to understand the basic relationship between the material's refractive index and the refractive index of liquids used for measurement.**
- **Inability to conduct calibrated visual estimate (CVE).**
- **Inability to check the internal consistency of analytical data.**
- **Inability to correctly measure particle size under a polarized light microscope.**
- **Inability to correctly create scale bars.**
- **Inability to understand the fundamental physics principles governing the relationship between a material's refractive index and its physical dimension.**
- **Inability to understand the fundamental geological principles governing the formation of minerals and mineral ore deposits.**

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